Professional and Practice-based Learning

Stephen Billett ·
Barbara Elisabeth Stalder ·
Vibe Aarkrog · Sarojni Choy ·
Steven Hodge · Anh Hai Le Editors

The Standing of Vocational Education and the Occupations It Serves

Current Concerns and Strategies For Enhancing That Standing



Professional and Practice-based Learning

Volume 32

Series Editors

Stephen Billett , Griffith University, Brisbane, Australia Christian Harteis, University of Paderborn, Paderborn, Germany Hans Gruber, University of Regensburg, Regensburg, Germany

Professional and practice-based learning brings together international research on the individual development of professionals and the organisation of professional life and educational experiences. It complements the Springer journal Vocations and Learning: Studies in vocational and professional education.

Professional learning, and the practice-based processes that often support it, are the subject of increased interest and attention in the fields of educational, psychological, sociological, and business management research, and also by governments, employer organisations and unions. This professional learning goes beyond, what is often termed professional education, as it includes learning processes and experiences outside of educational institutions in both the initial and ongoing learning for the professional practice. Changes in these workplaces requirements usually manifest themselves in the everyday work tasks, professional development provisions in educational institution decrease in their salience, and learning and development during professional activities increase in their salience.

There are a range of scientific challenges and important focuses within the field of professional learning. These include:

- understanding and making explicit the complex and massive knowledge that is required for professional practice and identifying ways in which this knowledge can best be initially learnt and developed further throughout professional life.
- analytical explications of those processes that support learning at an individual and an organisational level.
- understanding how learning experiences and educational processes might best be aligned or integrated to support professional learning.

The series integrates research from different disciplines: education, sociology, psychology, amongst others. The series is comprehensive in scope as it not only focuses on professional learning of teachers and those in schools, colleges and universities, but all professional development within organisations.

Please contact Grace Ma at grace.ma@springer.com if you wish to discuss a book proposal.

More information about this series at https://link.springer.com/bookseries/8383

Stephen Billett • Barbara Elisabeth Stalder Vibe Aarkrog • Sarojni Choy Steven Hodge • Anh Hai Le Editors

The Standing of Vocational Education and the Occupations It Serves

Current Concerns and Strategies For Enhancing That Standing



Editors
Stephen Billett
School of Education & Professional Studies

Griffith University

Brisbane, QLD, Australia

Vibe Aarkrog Danish School of Education Aarhus University Copenhagen, Denmark

Steven Hodge (5) School of Education & Professional Studies Griffith University Brisbane, OLD, Australia Barbara Elisabeth Stalder
Institute of Upper Secondary Education
Bern University of Teacher Education
Bern, Switzerland

Sarojni Choy (5) School of Education & Professional Studies Griffith University Brisbane, OLD, Australia

Anh Hai Le (5)
School of Education & Professional Studies
Griffith University
Brisbane, OLD, Australia

ISSN 2210-5549 ISSN 2210-5557 (electronic)
Professional and Practice-based Learning
ISBN 978-3-030-96236-4 ISBN 978-3-030-96237-1 (eBook)
https://doi.org/10.1007/978-3-030-96237-1

© The Editor(s) (if applicable) and The Author(s), under exclusive license to Springer Nature Switzerland AG 2022

This work is subject to copyright. All rights are solely and exclusively licensed by the Publisher, whether the whole or part of the material is concerned, specifically the rights of translation, reprinting, reuse of illustrations, recitation, broadcasting, reproduction on microfilms or in any other physical way, and transmission or information storage and retrieval, electronic adaptation, computer software, or by similar or dissimilar methodology now known or hereafter developed.

The use of general descriptive names, registered names, trademarks, service marks, etc. in this publication does not imply, even in the absence of a specific statement, that such names are exempt from the relevant protective laws and regulations and therefore free for general use.

The publisher, the authors and the editors are safe to assume that the advice and information in this book are believed to be true and accurate at the date of publication. Neither the publisher nor the authors or the editors give a warranty, expressed or implied, with respect to the material contained herein or for any errors or omissions that may have been made. The publisher remains neutral with regard to jurisdictional claims in published maps and institutional affiliations.

This Springer imprint is published by the registered company Springer Nature Switzerland AG The registered company address is: Gewerbestrasse 11, 6330 Cham, Switzerland

Series Editors' Foreword

Across countries with both developed and developing economies, the need to have effective skilled workforces is becoming increasingly important and apparent. The ability for nation states to provide the goods and services for their population's needs and worthwhile forms of employment and secure employability across working life, and the viability of their public and private sector enterprises have become increasingly important national goals. Much of this urgency is associated with the globalised economy in which the ability to generate these goods and services is central to the viability of meeting national needs, and also premised on the ability to be both export oriented, and also import-resistant to a degree that will sustain national economies. Moreover, in recent times, this issue of national self-reliance has become more central. Geopolitical tensions and thwarting of open markets and the development of mega economies are leaving some nation states prone to domination by reliance on others. So, more than ever, there is a need for the full range of occupational competencies and capacities within nation states, and this requirement is premised upon having a vocational education system that is capable of developing those capacities, attracting young people to engage in these occupations and developing their skills for them, and retaining them within these important occupations beyond the completion of the initial preparation.

However, confronting the achievement of this goal is the relative low standing of vocational education and the occupation it serves in an era of high aspiration. This is a phenomenon to be addressed across nations globally, and those at different points in the development of modern industrial economies. Accepting that this low standing exists and needs to be addressed, the contributions in this volume seek to identify the issues that need to be addressed to change that societal sentiment and secure greater participation in vocational education and training. It is accepted that the responses to this problem are likely to be country specific. Vocational education provisions differ enormously across nation states. Some are embedded in compulsory schooling, some within general education post school, some in specific vocational education institutions and some in elements of higher education institutions. Moreover, the range of factors that are shaping young people's choices about occupations and the pathways available to them are also country specific, to a degree.

vi Series Editors' Foreword

Hence, a key contribution of this volume is to identify a range of practices across countries of different kinds and locations but also draw out both common issues and those that are in some ways unique or specific to a particular nation state. The impetus for this book arises from an overall concern about the positioning of vocational education and a major study undertaken in Australia that engaged with researchers from Europe, Scandinavia and Asia to augment and extend that study and offer a range of diverse perspectives about this issue and how it might be redressed. The structure of the book offers the reader two overview chapters that separately introduce the problem to be addressed and then some responses to the issue of low standing of vocational education, respectively. Then, four chapters set out particular issues and reviews, before a section comprising studies from a range of different countries. Then, in a final section, the Australian study is presented over four chapters.

This volume presents a landmark publication in understanding and addressing this insidious and global problem. It provides analysis, considerations for progressing this issue, and a range of reviews and country studies that provide an unrivalled set of contributions in this field and in addressing that global issue. The importance here is not just in the uniqueness of contribution, but the salience of the topic and its importance globally.

Griffith University Brisbane, QLD, Australia

Stephen Billett

University of Regensburg Regensburg, Germany

Hans Gruber

University of Paderborn Paderborn, Germany February 2022 Christian Harteis

Preface

The relatively low standing of vocational education is of global concern, as it impacts young people's engagement in this important educational sector and the occupations it serves (Billett, 2014). This concern is acknowledged across countries with advanced industrial economies (Cedefop, 2014; Clement, 2014) and also those with developing economies (UNESCO-UNEVOC, 2018)). The consequences of this low standing can be profound. They include how governments, industry, enterprises, individuals and communities view and sponsor vocational education (Haybi-Barak & Shoshana, 2020), and what constitutes its purposes, form, governance and administration (Bedou, 2018). These perceptions also shape decision-making about whether it is a desirable, let alone, preferred option for young people to participate in vocational education either during compulsory schooling or as a post school educational pathway (James Relly, 2021). Its societal standing also shapes how teachers, parents and other familiars advise young people about post-school pathways and the willingness of employers to engage and support with its provisions. This concern exists even in countries where VET is regarded as having relatively high status, e.g., Germany (Deissinger & Ott, 2016), Demark (Aarkrog, 2020) and Switzerland (Stalder & Lüthi, 2020), and is what Wyman et al. (2017) refer to as the 'university or bust' phenomenon. These factors have never been more salient than in an era of high aspiration by young people and their parents about work and working life, and when high status, clean and well-paid occupations are privileged. It has been suggested that traditions, familial expectations and material considerations as well as strong desire for self-realisation underpin contemporary decision-making about post school options in countries with advanced industrial economies (Clement, 2014) as well as in those with developing economies (UNESCO-UNEVOC, 2018).

The relationship between occupations and the standing of VET is also profound, enduring and inseparable. This makes it difficult to consider the standing of vocational education and how it might be enhanced without also considering the occupations it serves. Over time, it has been the voices and sentiments of powerful others (e.g., aristocrats, theocrats, bureaucrats and academics) that have shaped discourses about the standing of occupations and their preparation (Billett, 2014). These sentiments have been developed through perspectives that often fail to acknowledge the

viii Preface

complexity of much of these occupational activities, and often lack an understanding of the requirements to perform those tasks and the development of those capacities (James Relly, 2021). Consequently, this legacy often leads to unquestioned assumptions about the relatively low standing of vocational education. This privileging has and continues to come at a cost to the standing, processes of and goals for this important educational sector. Perhaps this has never been more the case than in an era of high aspirations and expectations by young people and their parents about educational pathways and career options beyond schooling (Cedefop, 2014; Cho & Apple, 1998; El-AShmawi, 2017; Hiim, 2020). This can lead to decisions being made about preferred occupations in partial ways and in the absence of knowledge about them and what they comprise. All of this can lead to distortions in both these pathways and options, leading to over-enrolments in programmes that might not suit students (Stalder & Lüthi, 2020) or lead them to employable outcomes and leading to shortage of workers with the kinds of skills communities and countries require (Aarkrog, 2020; El-AShmawi, 2017). As noted, this issue has impacts across both countries with advanced industrial economies (Deissinger & Ott, 2016) and those that are characterised as developing (UNESCO-UNEVOC, 2018; UNESCO, 2018). In both, these circumstances are leading to a growing percentage of young people to move away from viewing vocational education as a viable school-based or post-school option, instead being attracted to higher education.

Whilst the promotion and realisation of young people's aspirations is a positive and worthwhile goal, there is a concern that a disproportionate number of young people are now seeking to participate in higher education which comes at a cost of not realising the benefits of participation in vocational education (Wolf, 2016). This participation is not just a post-school phenomenon, with decisions about participating in school stream exercising this preference earlier (UNESCO-UNEVOC, 2018). For instance, in Switzerland and Denmark, young people increasingly seek to enrol in general education programmes at the cost of VET programmes (both are situated at the upper secondary level), which leads to an unquestioning privileging of higher education (both concerning 'higher VET programmes' and university-based education). Therefore, the concerns here are about young people making informed choices, engaging in longer periods of post-school education that may not always be directly aligned with employment opportunities, and concerns about developing the kinds of skills that societies and communities need, including those required to sustain both public and private sector enterprises' viability (Billett, 2020).

Indeed, governmental concerns in countries with advanced industrial economies about the development of technical skills and young people's preference for higher education (i.e., university) over VET are pertinent here (James Relly, 2021). The UK, for instance, is experiencing declining levels of participation in courses for advanced technical skills required for contemporary and emerging economic needs (Wolf, 2016), and Germany is also claimed to be having difficulty securing adequate numbers of quality apprentices. This has led to competition amongst companies to secure such apprentices. South Korea has long struggled to attract young people to manufacturing work that sustains its economy (Cho & Apple, 1998). This issue is not restricted to schooling and entry-level occupational preparation. There are also

growing concerns about low levels of adult competence in technologically driven work, and engagement with continuing education and training, in many countries (Organisation for Economic Co-operational and Development, 2013). Moreover, countries in the developing world are struggling to encourage young people to engage in vocational education both within schooling and beyond it (UNESCO-UNEVOC, 2018). CEDEFOP and BiBB recently held a joint international symposium to address the issue of the low standing of vocational education and its economic consequences. Across participants from 60 countries there was a consensus that this issue has become crucial and almost universally stood as threat to vocational education.

Concerns about parity of esteem plays out in at least two ways. Firstly, where vocational education is taken to be an element of upper secondary schooling, unfavourable comparisons with general or academic education within schooling is inevitable. In such comparisons, and in the contemporary press for schools to prepare people for university education, there is a risk that vocational education will be seen primarily for those who perform poorly in schooling. Then, secondly, where vocational education comprises a post-schooling pathway, it is compared with the processes and outcomes of higher education. This factor alone (i.e., the different forms and locations of vocational education) emphasises the need to understand such provisions from a range of perspectives including how it is manifested in particular countries, its relationship to other education sectors in those countries and how occupations are perceived in those countries (Cedefop, 2014).

It is important, therefore, to influence and even intervene in young people's participation in vocational education at school and/or their decision-making about post-school options. That is, to inform in impartial ways that is inclusive of vocational education and the occupations it serves being considered as worthwhile options (Billett et al., 2020). Of course, there are a range of factors and influences. At one level, there have always been hierarchies of status and desirability of occupations and some being more preferable than others. So, why has there been a change which is seeing disproportionate numbers of young people preferring universitybased higher education over vocational education? This might be explained by enhanced aspirations. Certainly, as more of the population secure higher education, the percentage of the population who have experienced and can see the worth of a university education is likely to increase, and correspondingly that of vocational education might decrease. As these individuals become parents and have heightened aspirations for their children and those children also engage with others who have greater aspirations, the preferred avenue to realising them is through higher academic or vocational education, in those countries where it exists, not vocational education. Moreover, in many countries, the length of schooling has been extended, and it is possibly inevitable that an extension of time and commitment in schooling leads to heightened expectations about maximising that investment through educational pathways and occupations that are seen to be more attractive than what vocational education has to offer. Part of those extended education provisions includes an emphasis on planning for post-school options that of themselves may well lead to a concentrated focus on maximising post-school options, which may well be x Preface

supporting the emphasis on interest in higher education. Then, for those who are undecided about their preferred occupation, universities with their less specific educational programmes might offer more attractive and relevant programmes than those in vocational education which tend to be occupationally specific. It is also necessary to consider other options and possibilities. For instance, in Denmark (Aarkrog, 2020) and Switzerland (Stalder & Lüthi, 2020), young people with a VET diploma at the upper secondary can participate in higher education. They do not have to choose between higher education and VET but can do both.

It is for these reasons that this volume aims to elaborate the sources of the low standing of vocational education and training (VET) and the occupations it serves (Billett, 2014), their manifestation in the countries and, importantly, how this can be redressed. Recent research identifies VET students' preferences associated with gender, age and educational achievement (Gore et al., 2017). The book offers perspectives about the standing of vocational education from a range of countries (e.g., Denmark, Switzerland, Romania, France, Vietnam, Germany, Norway, Australia, India and Finland) with distinct systems to identify and inform policy interventions about promoting the standing and status of VET across these and other countries. The overall emphasis here is on identifying through what means might the standing of this form of education and, conjointly, the occupations it serves be enhanced.

Structure of the Book

This edited monograph is structured into three discrete sections. Part I comprises two chapters that provide overviews, syntheses, and conclusions from the collective contributions of the volume. The first focuses on the kind and extent of the issue raised about the factors shaping the standing of vocational education and the occupations it serves. The second draws on the collective contributions to identify ways to address and redress these standings.

Part II comprises four chapters that inform the issues through providing reviews of literature and reports that set out the range of issues associated with the low standing of vocational education and the occupation it serves and bases through which that standing is premised and how it is manifested in contemporary times. This includes a review of what factors and practices shape young people's decision-making about post-school pathways.

Part III provides a series of eight country studies in which nation-specific and general issues and factors associated with the standing of vocational education are discussed and what is being done to redress problems associated with that standing in those countries. These are, respectively, from France, Finland, India, Norway, Vietnam, Denmark, Switzerland, and Romania.

Part IV, comprising four chapters, reports the processes and findings of a study undertaken in Australia that sought to understand the processes through which young people make decisions about post-school pathways, including those associated with vocational education, and what measures can be enacted to enhance

Preface xi

its standing and the occupations it serves, provide mechanisms to supply young people and their parents with impartial advice and information and engage in more informed accounts of post-school options.

Brisbane, QLD, Australia Stephen Billett

Bern, Switzerland Barbara E. Stalder

Copenhagen, Denmark Vibe Aarkrog

Brisbane, QLD, Australia Sarojni Choy

Brisbane, QLD, Australia Steven Hodge

Brisbane, QLD, Australia Anh Hai Le

January 2022

References

Aarkrog, V. (2020). The standing and status of vocational education and training in Denmark. *Journal of Vocational Education and Training*, 72(2), 170–188.

Bedou, A. (2018). Work-based learning for young people in Algeria. Retrieved from Turin.

Billett, S. (2020). Perspectives on enhancing the status of vocational education and the occupations it serves. *Journal of Vocational Education and Training*, 72(2), 161–169.

- Billett, S., Choy, S., & Hodge, S. (2020). Enhancing the standing of vocational education and the occupations it serves: Australia. *Journal of Vocational Education and Training*, 72(2), 270–296.
- Cedefop. (2014). Attractiveness of initial vocational education and training: Identifying what matters (Cedefop Research Paper No. 39). Publications Office of the European Union. Retrieved from https://www.cedefop.europa.eu/files/5539_en.pdf
- Cho, M. K., & Apple, M. (1998). Schooling, work and subjectivity. British Journal of Sociology of Education, 19(3), 269–291.
- Clement, U. (2014). Improving the image of technical and vocational education and training. Federal Ministry for Economic Co-operation and Development. Retrieved from https://www.dcdual-vet.org/wpcontent/uploads/2014_GIZ_Improving-the-Image-of-Technical-and-Vocational-Education-and-Training_Asynthesis.pdf
- Deissinger, T., & Ott, M. (2016). Tertiarisation of vocational education and training and its implications Problems and issues in Germany and France. In S. Bohlinger, T. K. A. Dang, & M. Klatt (Eds.), *Education policy: Mapping the landscape of scope* (pp. 268–296). Peter Lang. https://doi.org/10.3726/978-3-653-05044-8.
- El-AShmawi, A. (2017). Reviewing work-based learning programmes for young people: Republic of Egypt. Retrieved from Beruit.
- Gore, J., Ellis, H., Fray, L., Smith, M., Lloyd, A., Berrigan, C., Lyell, A., Weaver, N., & Holmes, K. (2017). Choosing VET: Investigating the VET aspirations of school students. NCVER.
- Haybi Barak, M., & Shoshana, A. (2020). Separatist biopolitics: The dual discourse of the vocational education policy in Israel. *Journal of Vocational Education & Training*, 72(2), 297–314.
- Hiim, H. (2020). The quality and standing of school-based Norwegian VET. *Journal of Vocational Education and Training*, 72(2), 228–249.

James Relly, S. (2021). The political rhetoric of parity of esteem. *Oxford Review of Education*, 1–16. Organisation for Economic Co-operational and Development. (2013). *OECD skills outlook 2013: First results from the Survey of Adult Skills*. OECD.

- Stalder, B. E., & Lüthi, F. (2020). Job resources and career success of IVET graduates in Switzerland: A different approach to exploring the standing of VET. *Journal of Vocational Education and Training*, 72(2), 189–208.
- UNESCO. (2018). Work-based learning programmes for young people in the Arab region: A comparative and longitudinal analysis A synthesis report. Retrieved from Beurit.
- UNESCO-UNEVOC. (2018). Short summary of the virtual conference on improving the image of TVET: Making TVET attractive to youth. Retrieved from https://vocationsandlearning.files. wordpress.com/2019/10/vc_synthesis_21_final.pdf
- Wolf, A. (2016). Remaking tertiary education: Can we create a system that is fair and fit for purpose. Education Policy Institute. Retrieved from: http://epi.org.uk/report/remaking-tertiary-education-can-we-create-a-system-that-is-fair-and-fit-forpurpose/#
- Wyman, N., McCrindle, M., Whatmore, S., Gedge, J., & Edwards, T. (2017). *Perceptions are not reality: Myths, realities & the critical role of vocational education & training in Australia.* Skilling Australia Foundation.

Acknowledgments

The editorial team would like to acknowledge the range of institutional, personal, and professional contributions that have supported the production of this book. Principally, we wish to acknowledge the funding agency – the Department of Education Queensland through their Education Horizons research program. Without that funding and support of the high school system, private colleges, and vocational education system in the State of Queensland, Australia, it would have been impossible to undertake and report the Australian elements of this edited volume. Moreover, the support provided by the Griffith Institute for Educational Research and the School of Education and Professional Studies at Griffith University permitted the engagement with colleagues from overseas and secured their important contributions to this volume. In addition, a project undertaken through UNESCO - UNEVOC based in Bonn, Germany, permitted engagement with practitioners from over 80 countries who are seeking to enhance the status of vocational education and permitted its contributions to be more broadly engaged with and understood within those countries. In this way, such a broadly based study relied upon the help and support of a range of agencies, institutions, and individuals who have as a common concern the further development of vocational education as an important educational sector.

Also, the lead editor, who is also the overall project leader, would like to acknowledge the many contributions provided to this project by Professor Sarojni Choy, Dr. Steven Hodge, Dr. Anh Hai Le, and Professors Vibe Aarkrog (Denmark) and Barbara Stalder (Switzerland) who contributed enormously to the development of this book.

In addition, the editorial team would like to thank and acknowledge the contributions provided in each of the chapters by colleagues who have committed time and effort to undertake research and submit their findings for this volume.

Contents

Part	t I The Standing of Vocational Education: Perennial Issues, Emerging Concerns and Ways Forward	
1	The Standing of Vocational Education: A Global Concern with Diverse Meanings and Implications	3
2	Enhancing the Standing and Status of Vocational Education Stephen Billett, Steven Hodge, and Vibe Aarkrog	19
Part	t II Issues, Sources and Consequences of the Standing and Status of Vocational Education	
3	Understanding the Purpose and Standing of Technical and Vocational Education and Training	49
4	Improving the Standing of VET: Perspectives from Countries with Developing Economies	63
5	The Standing of Dual Apprenticeships in Germany: Institutional Stability and Current Challenges Thomas Deissinger	83
6	Shaping Young People's Decision-Making About Post-School Pathways: Institutional and Personal Factors Stephen Billett, Darryl Dymock, Steven Hodge, Sarojni Choy, and Anh Hai Le	103

xvi Contents

Part	III Country Studies of the Standing of Vocational Education and the Occupations It Serves	
7	Alternance Training as a Way to Improve the Attractivity of Vocational Education Programmes in France	139
8	Promoting the Standing of VET in Finland: Balancing the Different Aims of VET Heta Rintala and Petri Nokelainen	159
9	Attractiveness of Vocational Education and Training in India: Perspectives of Different Actors with a Special Focus on Employers Matthias Pilz and Muthuveeran Ramasamy	177
10	The Quality and Status of School-Based Norwegian VET	201
11	Perspectives on Informing Post-School Pathways: A Vietnamese Case Study	223
12	Enhancing the Standing of VET in Switzerland	247
13	The Significance of Learning Environment and Decision-Making for Enrolment in and Completion of VET: A Danish Case Vibe Aarkrog	265
14	Elevating the Standing of Vocational Education and Training in Romania	287
Part	IV Enhancing the Standing and Status of Vocational Education: An Australian Study	
15	Investigating Enhancing the Standing of Vocational Education and the Occupation it Serves: Purposes, Processes and Phases Stephen Billett, Sarojni Choy, Steven Hodge, and Anh Hai Le	309
16	Influences on Post-School Decision-Making: Perspectives of School Students, Parents, Teachers (Phase 1)	325
17	Surveys of Students, Parents and Teachers (Phase 2)	353

Contents xviii

18	Informing and Advising the Zones of Influence Shaping	
	Young People's Decision-Making About Post-School	
	Pathways (Phase 3)	373
	Stephen Billett, Darryl Dymock, Sarojni Choy, Steven Hodge, and Anh Hai Le	
Ind	ex	397

Contributors

Vibe Aarkrog, is Associate Professor of Vocational Education and training (VET) at Aarhus University, Denmark. Her work experience includes research, development, teacher training, and policy development within VET, particularly focusing on the interrelation of theory and practice in VET.

Stephen Billett is Professor of Adult and Vocational Education at Griffith University, Brisbane, Australia, and also an Australian Research Council Future Fellow. He has worked as a vocational educator, educational administrator, teacher educator, professional development practitioner, and policy developer in the Australian vocational education system and as a teacher and researcher at Griffith University.

Sarojni Choy is Professor of Adult and Vocational Education in the School of Education and Professional Studies, Griffith University, Brisbane, Queensland, Australia. Her teaching and research expertise are in workplace learning, adult education, vocational education and training, connecting learning in different settings, continuing education and training, professional development, and workforce capacity building.

Thomas Deissinger is Professor of Business and Economics Education at the University of Konstanz/Germany. He has worked in the field of comparative VET research for more than 30 years, with a special focus on Anglophone countries. He is a member of AVETRA and an editorial advisory board member of JVET.

Darryl Dymock is an adjunct senior research fellow with the Griffith Institute for Educational Research, Griffith University, Brisbane. His research focus over many years has been on adult and vocational education, including national projects on non-accredited learning, and he has worked on the recent study on enhancing the standing of vocational education and the occupations it serves.

xx Contributors

Hilde Hilm is a professor at Oslo Metropolitan University, Institute of Vocational Teacher Education. Her field of interest is vocational pedagogy and didactics. She is the author of several books and articles, some of which are widely used in Norwegian and Danish vocational teacher education. She has led several extensive curriculum research projects in vocation education programs.

Steven Hodge is deputy head of school (research) in the School of Education and Professional Studies at Griffith University, Queensland, Australia. He teaches and researches in the areas of curriculum, philosophy, and policy with a particular focus on the design of curriculum and the ways educators work with curriculum.

Anh Hai Le is a lecturer and senior research assistant at Griffith University. Her research interest focuses on workplace learning and curriculum development in tertiary education, with a specific emphasis on the process of building knowledge through scholarly engagement with industry and tertiary institutions. Much of her recent research has focused on lifelong and adult education.

Fabienne Lüthi is a PhD candidate in occupational psychology and researcher at the Berne University of Teacher Education, Switzerland. Her research focuses on personal and situational resources and the interrelation between school-based and workplace learning in dual vocational education and training programs and on career development and success.

Petri Nokelainen is Professor of Engineering Pedagogy at Tampere University, Finland. His research focuses on motivation, self-regulation, emotions, and talent development during vocational and professional education and in the working life.

Maria-Carmen Pantea is Professor of Sociology at the "Babeş- Bolyai" University, Romania. She is member of the European Commission Expert Group on Quality Investment in Education and Training and member of the advisory group of the Pool of European Youth Researchers of the EU-CoE youth partnership.

Matthias Pilz is Full Professor of Economics and Business Education at the University of Cologne and director of the German Research Center for Comparative Vocational Education and Training. From 2010 to 2017, he has also been director of the CMIS-UC (Center for Modern Indian Studies at the University of Cologne). His research interests are in international comparative research in VET, transitions from education to employment, and teaching and learning.

Muthuveeran Ramasamy is Senior Researcher at the University of Cologne. He obtained his PhD from the University of Cologne, Germany. Currently, he is working on the research project "QualIndia: Quality Analysis in Indian Vocational Education and Training Institutions, with a Focus on Industrial Training Institutes and Polytechnic Colleges." His research interests are in international comparative research in VET, skill development in India, and rural development.

Contributors xxi

Susan James Relly is associate head (education), Social Sciences Division, Director, SKOPE Research Centre, and deputy director of the Department of Education, University of Oxford. Susan's entire career has been in education in various forms: she taught in secondary schools in Australia and England before starting her academic career. Susan's area of research interest is in vocational education and training policy; apprenticeship and work-based learning; social mobility and nongraduate occupations; and further education, teaching, and learning.

Heta Rintala is a principal research scientist (tenure track) at Häme University of Applied Sciences, Hämeenlinna, Finland. She works as a researcher and developer at HAMK Edu Research Unit and in the field of VET with a specific interest in the VET system, work-based learning, and guidance.

Barbara E. Stalder is Professor of Educational and Social Science at the Institute of Upper Secondary Education at the Berne University of Teacher Education, Switzerland. Her research interests focus on learning, student engagement and drop-out, school-to-work transitions and career development in VET, and career success over the life course.

Laurent Veillard is Professor of Vocational Education and Training at Institut Agro, Dijon, France. He is a member of the FoAP (Vocational Training and Reaching) Research Unit (https://foap.cnam.fr/). His research interests focus on vocational training and learning of young people in different contexts (school, workplace, hybrid learning environment) in a vocational didactics approach.

Part I The Standing of Vocational Education: Perennial Issues, Emerging Concerns and Ways Forward

Chapter 1 The Standing of Vocational Education: A Global Concern with Diverse Meanings and Implications



Barbara E. Stalder, Sarojni Chov, and Anh Hai Le

Abstract The low standing of vocational education (VET) and the occupations it serves is emerging as a concern in countries with both advanced and developed industrial economies. This issue manifests itself differently across countries depending on the economic trajectory and where VET sits within their schooling or tertiary education systems. In most instances, however, there are significant consequences for engaging young people in VET provisions, and developing the kinds of skills that the economies in these countries need and, in the places, where they are needed. The standing of VET and the occupations it serves are perennial issues, so there is nothing wholly new here. Drawing on the contributions across the section of this volume, this chapter explores the aspirations and expections of young people, parents and familiars in countries with developed and developing economic bases, and the positioning of VET as a post-school option. Specifically, the relative status of VET, its attractiveness and educational outcomes are elaborated, accounting for diverse schooling and tertiary education systems. The contributions are summarised to identify ways in which societal sentiments about the forms of work that are seen as desirable their (mis-)alignment with aspirational generations of young people, and their current and emerging consequences are manifested. Amongst others, the consequences will be understood in terms of the growing struggles for countries to interest and engage young people in occupations that provide goods and services to communities, nationally and regionally. Included here are the ways that the quantum of skillful capacities required by societies are not being replaced and are becoming complex and demanding to learn. More young people are engaging on circuitous and lengthy tertiary educational journeys away from these occupations. Through a summary of the contributions, the perennial issue of the standing of VET and the occupations it serves, the extent of the concerns arising from an intensification

B. E. Stalder (⊠)

Bern University of Teacher Education, Bern, Switzerland e-mail: barbara.stalder@phbern.ch

S. Choy · A. H. Le

Griffith University, Brisbane, QLD, Australia

4 B. E. Stalder et al.

of this issue are identified and elaborated as are their consequences for nation states and regions. In sum, this chapter offers a summary of the key issues that shape and sustain the relative low standing of VET and the occupations it serves.

Keywords Vocational education and training \cdot Standing \cdot Status \cdot Post-school pathways \cdot Institutional factors \cdot Personal practices

Standing of Vocational Education and the Occupations It Serves

The relatively low standing of vocational education (VET) is of global concern, as it impacts young people's engagement in this important educational sector and the occupations it serves (Billett, 2014). This concern is acknowledged across countries with advanced industrial economies (Cedefop, 2014; Clement, 2014) and also those with developing economies (UNESCO-UNEVOC, 2018). The consequences of this low standing can be profound. They include how governments, industry, enterprises, individuals and communities view and sponsor VET (Haybi-Barak & Shoshana, 2020), and what constitutes its purposes, form, governance and administration (Bedoui, 2019). These perceptions also shape decision-making about whether it is a desirable, let alone, preferred option for young people to participate in VET either during compulsory schooling or as a post-school educational pathway (James Relly, 2021). The societal standing of VET also shapes how teachers, parents and other familiars advise young people about post-school pathways and the willingness of employers to engage and support with its provisions. This concern exists even in countries where VET is regarded as having relatively high standing e.g. Germany (Deissinger & Ott, 2016), Demark (Aarkrog, 2020) and Switzerland (Stalder & Lüthi, 2020) and is what Wyman et al. (2017) refer to as the "university or bust" phenomenon. These factors have never been more salient than in an era of high aspiration by young people and their parents about work and working life, and when high status, clean and well-paid occupations are privileged. It has been suggested that traditions, familial expectations and material considerations as well as strong desire for self-realisation underpin contemporary decision-making about postschool options (upper secondary or tertiary level) in countries with advanced industrial economies (Clement, 2014) as well as in those with developing economies (UNESCO-UNEVOC, 2018).

The relationship between occupations and the standing of VET is also profound, enduring, and inseparable. This makes it difficult to consider the standing of VET and how it might be enhanced without also considering the occupations it serves. Over time, it has been the voices and sentiments of powerful others (e.g., aristocrats, theocrats, bureaucrats and academics) that have shaped discourses about the

standing of occupations and their preparation (Billett, 2014). These sentiments have been developed through perspectives that often fail to acknowledge the complexity of much of these occupational activities, and usually lack an understanding of the requirements to perform those tasks and the development of those capacities (James Relly, 2021). Consequently, this legacy leads to unquestioned assumptions about the standing of VET. This privileging has and continues to come at a cost to the standing, processes of and goals for this important educational sector. Perhaps this cost has never been more the case than in an era of high aspirations and expectations by young people and their parents about educational pathways and career options beyond schooling (Cedefop, 2014; Cho & Apple, 1998; El-Aswami, 2018; Hiim, 2020). This high expectation can lead to decisions being made about preferred occupations in partial ways and in the absence of knowledge about them and what they comprise. All of the issues discussed above can lead to distortions in both pathways and options, leading to over-enrolments in programs that might not suit students (Stalder & Lüthi, 2020) or lead to shortage of workers with the kinds of skills communities and countries require (Aarkrog, 2020; El-Aswami, 2018). As noted, this issue has impacts across both countries with advanced industrial economies (Deissinger & Ott, 2016) and those that are characterised as developing (UNESCO-UNEVOC, 2018; UNESCO, 2019). In both, these circumstances are leading to a growing percentage of young people moving away from viewing VET as a viable option at the upper secondary or tertiary level, instead taking up university education.

Whilst the promotion and realisation of young people's aspirations is a positive and worthwhile goal, there is a concern that a disproportionate number of young people are now seeking to participate in academic rather than professional higher education (HE) which comes at a cost of not realising the benefits of participation in VET (Wolf et al., 2016). This participation is not just a post-school phenomenon, but also in the preference of participating in academic instead of vocational stream during secondary schooling (UNESCO-UNEVOC, 2018). For instance, in Switzerland and Denmark, young people increasingly seek to enroll in general education programmes at the cost of VET programmes (both situated at the upper secondary level), which leads to an unquestioning privileging of HE (higher professional programmes and university-based education). Therefore, the concerns here are about young people making informed choices, engaging in longer periods of postschool education that may not always be directly aligned with employment opportunities, and concerns about developing the kinds of skills that societies and communities need, including those required to sustain viability of both public and private sector enterprises (Billett, 2020).

Indeed, governmental concerns in countries with advanced industrial economies are associated with the development of technical skills and young people's preference for HE over VET are pertinent here (James Relly, 2021). The UK, for instance, is experiencing declining levels of participation in courses for advanced technical skills required for contemporary and emerging economic needs (Wolf et al., 2016). Germany is also having difficulty securing adequate numbers of highly skilled apprentices and increasing competition amongst companies to secure such apprentices. South Korea has long struggled to attract young people to manufacturing work

that sustains its economy (Cho & Apple, 1998). This issue is not restricted to schooling and entry-level occupational preparation. There are also growing concerns about low levels of adult competence in technologically-driven work, and engagement with continuing education and training, in many countries (OECD, 2013). Moreover, countries in the developing world are struggling to encourage young people to engage in VET both within compulsory schooling and beyond it (UNESCO-UNEVOC, 2018). European Centre for the Development of Vocational Training (CEDEFOP) and the Federal Institute for Vocational Education and Training (BIBB) recently held a joint international symposium to address the issue of the low standing of VET and its economic consequences. Across participants from 60 countries there was a consensus that this issue has become crucial and almost universally stood as threat to VET (Billett et al., 2018).

These concerns about parity of esteem between VET and HE play out in at least two ways. Firstly, where VET is taken to be an element of upper secondary schooling, unfavourable comparisons with general or academic education within schooling are inevitable. In such comparisons, and pressure for schools to prepare people for university education, there is a risk that VET will be seen primarily for those who perform poorly in schooling. Then, secondly, where VET comprises a pathway, it is compared with the processes and outcomes of HE. This factor alone (i.e., the different forms and locations of VET) emphasises the need to understand such provisions from a range of perspectives including how it is manifested in particular countries, its relationship to other education sectors and how occupations are perceived in those countries (Cedefop, 2014).

It is important, therefore, to influence young people's participation in VET at school and/or their decision-making about post-school options. That is, to inform in impartial ways to consider VET and the occupations it serves as worthwhile options (Billett et al., 2020). Of course, there are a range of factors and influences. At one level, there have always been hierarchies of status and desirability of occupations – some being more preferable than others – a change which is seeing disproportionate numbers of young people preferring HE over VET. Certainly, as more of the population seek to secure access to university-based HE, the percentage of the population who have experienced and can see the worth of a university education is likely to increase and, correspondingly, that of VET might decrease. As these individuals become parents and have heightened aspirations for their children and those children also engage with others who have greater aspirations, the preferred avenue to realising them is through HE, not VET. Moreover, in many countries, the length of schooling has been extended and it is possibly inevitable that an extension of time and commitment in schooling leads to heightened expectations about maximising that investment through educational pathways and occupations that are seen to be more attractive than what VET has to offer. Part of those extended education provisions includes an emphasis on planning and extending post-school options and greater interest in HE. Then, for those who are undecided about their preferred occupation, universities with their less occupation-specific programs might be seen as more attractive than the more occupation specific VET programs that 'lock' young people too early if they are unsure of a future career (see e.g., Hodge et al.,

2022). It is also necessary to consider other options and possibilities. For instance, in Denmark (Aarkrog, 2020) and Switzerland (Stalder & Lüthi, 2020), young people with a VET-diploma at the upper secondary level can participate in HE. They do not have to choose between HE and VET but can do both.

It is for these reasons that this proposed volume aims to elaborate the sources of the low standing of VET and the occupations it serves (Billett, 2014), their manifestation in countries and, importantly, how this can be redressed. Recent research identifies VET students' preferences associated with gender, age and educational achievement (Gore et al., 2017). This edited volume offers perspectives about the standing of VET from a range of countries (e.g., Denmark, Switzerland, Romania, France, Vietnam, Germany, Norway, Australia, India and Finland) with distinct systems to identify and inform policy interventions about promoting the standing and status of VET across these and other countries. The overall emphasis here is on identifying through what means might the standing of this form of education, and conjointly, the occupations it serves, be enhanced.

Projects Informing This Volume

The contributions to this book focus on the manifestations of the standing of VET and the occupations it serves in the developed and developing world, and importantly strategies and initiatives to redress its low standing. The book is comprised of three sections. Section One comprises two chapters that provide overviews, syntheses, and conclusions from the collective contributions of the volume. The first focuses on the kind and extent of the issue raised about the factors shaping the standing of VET and the occupations it serves. The second draws on the collective contributions to identify ways to address and redress these standings. Section Two comprises four chapters that inform the issues through providing reviews of literature and reports that set out the range of concerns associated with the low standing of VET and the occupation it serves. The content discusses the bases through which that standing is premised and how it is manifested in contemporary times. Billett and colleagues (2022c) provide a comprehensive review of literature on factors and practices that shape young people's decision-making about post-school pathways. James Relly (2022) discusses the disparity of vocational and academic routes, particularly in the UK, and promotes the standing of VET arising from a better understanding of its purpose. Billett and Le (2022) report on perspectives about the standing of VET delegates from developing countries in a virtual conference organised by UNESCO-UNEVOC. Deissinger (2022) outlines the historical development and cultural influences which shape the standing of VET in the German context.

Section Three provides a series of eight country studies in which nation-specific and general issues and factors associated with the standing of VET are discussed and what is being done to redress problems associated with that standing in those countries. These are, respectively, from France, Finland, India, Norway, Vietnam, Denmark, Switzerland and Romania. Veillard and Dijon (2022) report various

measures to promote alternance training in VET in France and discuss their effects on the attractiveness of VET to young people. Rintala and Nokelainen (2022) introduce recent developments in VET and its future directions in Finland. Pilz and Ramasamy report on the perspective of employers in comparison with other stakeholders (i.e., students, parents and VET teachers) about the attractiveness of VET in India. In the Norwegian context, Hiim (2022) identifies the issues of relevance and coherence between educational content in VET programmes and associated vocational competence and discusses the attempts to enhance VET's standing and quality. Le (2022) contributes to understanding of factors that shape young people's decision-making about post-school pathways in Vietnam, stemming from a community- and family-oriented Confucian perspective. Aarkrog (2022) addresses the issue of enrolment and completion rates within the Danish VET system and emphasises the role of teachers in developing younger's decision-making skills toward completing their VET programme. In the Swiss context, Stalder and Lüthi (2022) address challenges linked to securing learning opportunities in workplaces and VET schools, and career development opportunities for VET graduates. The last contribution in this section (Pantea, 2022) provides a critical discussion of the quality of Romanian VET standing and its emerging dual system, which has received strong policy endorsement and creates a small niche but not a structural remedy.

The fourth section, comprising four chapters, reports the processes and findings of a study undertaken in Australia that sought to understand the processes through which young people make decisions about post-school pathways, including those associated with VET, and what measures can be enacted to enhance its standing of VET and the occupations it serves, provide mechanisms to supply young people and their parents with impartial advice and information and engage in more informed accounts of post-school options. Firstly, Billett and colleagues (2022a) provide an overview of the project including its rationale and objectives, and elaboration on the three phases and their project. Secondly, Hodge et al. (2022) present detailed analysis and findings from Phase 1 which includes interviews and focus groups with different stakeholders (i.e., school students, parents, school teachers and VET teachers). Then, Choy et al. (2022) report on Phase 2 which comprises surveys with a larger population of these stakeholder groups. The final contribution (Billett et al., 2022b) dedicates to discussing strategies to enhance the standing of VET in Australia.

Factors Shaping the Standing of VET

There is an intertwining of institutional factors and the practices of people who have an influence upon the decision-making of young people about post-school pathways. This is informed by contributions from Billett et al. (2022c) in their review of recent literature addressing the factors and practices shaping young people's decision-making about those pathways. Although societal factors play important roles in this decision-making, the practices of parents, teachers and other familiars

are salient in this decision-making and, therefore, efforts to redress this issue. There is insufficient evidence to suggest that there are strong social determinants operating alone. Instead, it is the interplay between societal factors and personal practices that lead to decision-making, and it is these that collectively are shaping preferences away from participating in VET and the occupations it serves. Some factors are nation-specific and are highlighted in the contributions from the country studies in this volume.

Institutional Factors Shaping the Standing of VET

The consequences of the low standing of VET can be profound as are discussed within the contributions to this edited volume. They include how governments, industry, enterprises and communities view, support, fund and engage with VET programmes.

One of the key issues lies in the HE-VET divide, which is highlighted in the case of England. James Relly (2022) argues that the historical class divide which finds its continuation in today's education system in England, the nature of vocational learning and qualification development, the impact of mass HE expansion, a hierarchical labour market structure, and methods of assessment in VET all impact the standing of VET. The way the class system in England operates and its influence through qualifications systems across the world compounds the way in which middle-class and upper-class parents perceive their children attending the academic route rather than participating in the vocational route. With the decisions about VET being made by politicians, policymakers and civil servants who have little or no experience of the vocational route, it is not surprising that the policy discourse is degrading to the vocational route. As a result, parents and students do not see it as a viable option. Rather than bridging the academic-vocational divide, reforms led to an "academic drift" within VET where, in order to achieve "equal standing", qualifications become more like those with which they seek "parity". The challenge is exacerbated by the fact that many vocational qualifications in England contain little theoretical knowledge in England. Consequently, the two routes are more polarised than in some other European countries, for example, Germany and the Netherlands. The underlying issue is that a very narrow concept of skills formation based on the ability to complete specific tasks, rather than occupational capacity, has been maintained emphasising outcomes rather than on understanding that is based on knowledge and broader skill development.

Also, the massification of HE, in essence, is exacerbating the problem. Such massification of HE, or academisation, among other implications, is now leading to fewer applicants for apprenticeships in Germany (Deissinger, 2022). Academic drift and meritocracy have become stronger since the 1990s and now have an impact on the supply of skilled employees in several branches of the German economy (Wolter & Kerst, 2015). The global academic drift towards upper secondary education (which also means reducing selection after primary school in the last years) has a lot

to do with the educational aspirations of parents, as they are manifestations of what sociological research has called "meritocratic logic" (Goldthorpe, 1996). According to this principle, the main function of certificates, qualifications, and underlying educational pathways does not consist in the benefit of the contents and the functional relevance of the respective qualification for the labour market, rather refers to its formalised result (Deissinger, 2022). Although there is no real danger to German VET, academisation is on the agenda and one of the suspense-packed questions certainly remains. That is, the issue of a long-term "survivability" of apprenticeships in a modern "learning society" (Deissinger, 2022). Thus, within this complex arena of qualifications, the worth of VET qualifications is ultimately dependent on employers' preference and valuing their currency in labour markets. Lack of professional licenses to practice has long been criticised as it fundamentally undermines vocational qualifications and provides little incentive for employers to support VET schemes (James Relly, 2022). In turn, this perpetuates the reputational divide created between academic and vocational qualifications impacting their standing.

In addition to Germany, Finland, a country with a relatively high VET status and specific strengths compared to its international counterparts, has experienced undermining and even negative attitudes towards VET (Rintala & Nokelainen, 2022). VET is not handled in a balanced way in the media and in public discussions. Instead, it is often depicted from a negative perspective that highlights the challenges. Such negative framing was considered to impact the image of VET, as the individual accounts of youth, parents or teachers are generalised to represent the entire field of VET. When discussing the standing of VET in relation to working life and employment, the skilled and qualified VET graduates were needed by the labour market. However, there were field-related differences. For example, some VET fields are not attractive for highly motivated students, whilst in other fields, choosing the VET pathway may imply lower wage premiums and weaker career prospects than choosing general education. Thus, Finnish VET generally had a lower standing than general and higher education.

In another European context, Pantea (2022) examines the unsolved tensions generated when compelling policy goals intersect young people's choices and interrogates the assumption that the problem for Romanian VET is mainly one of image, as currently implied in the policy efforts. Based on a critical discussion of the quality of Romania's VET (Pantea, 2022) the increased precarisation of jobs, the arguments over young people's "disproportionate aspirations" hold a middle-class bias and do not apply to the groups VET is vying for. Ultimately, the author brings into debate the ambivalent role played by the range of EU-funded short-term training courses and claims that the emerging dual system creates a new niche, yet not a structural remedy. Several 'blind spots' of the media campaigns promoting VET are also considered, in particular the gendered nature of the 'success stories' failing to engage with the precarious nature of employment. In recent decades, problems of relevance in VET have come into focus. For instance, Hiim (2022) posits that the major challenges regarding the quality in school-based Norwegian VET concern vocational relevance and coherence. Lack of vocational relevance in the schoolbased part of Norwegian VET has led to distrust and discontent among potential employers as well as students. In France, employers often complained about overly academic education that failed to adequately prepare graduates to engage effectively in work situations (Veillard and Dijon, 2022). Secondary VET risks being drained of its most able students, with education policies encouraging young people to engage in studies that provide direct access to and greater chances of success in HE. As a result of this "diploma inflation" or "credential creep" process, the standing of both secondary VET programmes and the trades accessible via diplomas specific to this field of education has deteriorated considerably. Enrolments in these courses are increasingly from those who failed in general educational courses, thereby making VET a second-class education choice.

The issue regarding employers' dissatisfaction with VET graduate employability skills is exacerbated in Pilz and Ramasamy's (2022) contribution in the context of India, a country which is undergoing significant structural, economic and social change. The employers in their study reported that the quality of training the VET graduates received were not matching their companies' needs. That is, the graduates lacked practical skills to perform on the job and were perceived negatively by employers. Interestingly these companies are primarily concerned with economic rather than educational factors. Employers neither indicate an interest in investing in training nor show commitment to employing skilled employees in the longer run. That is, they tend to employ VET graduates, pay them minimum salary and are not interested to retain them beyond the apprenticeship period due to high costs. As a consequence, poorly paid VET graduates are perceived low status in the labour market.

In sum, it is noteworthy that a range of institutional factors – those from and projected by society and social institutions – make suggestions about the kinds of work that are available, what occupations and pathways are viewed as being worthy to aspiring young people and their parents. It is apparent that educational policies and practices reinforce particular emphases and privilege HE as being far more desirable than VET. As noted earlier, this is a phenomenon that exists globally, and in both countries with advanced and developing industrial economies. These institutional factors are suggested by the social world explicitly and implicitly. However, it is important to understand how these suggestions are engaged with and practised by young people, their parents and familiars in decision-making about post-school options.

Personal Factors Associated with Post-school Pathways Decision-Making

A key and growing concern is that in an era of growing aspiration in countries with both advanced and developing industrial and social economic bases, the low standing of VET has negative impacts on young people's and their parents' interest and participation in VET. For instance, in a UNESCO-UNEVOC virtual conference, 346 delegates from 82 countries, with a few exceptions, report that the current standing of VET limits its attractiveness to young people, their parents, and even employers (Billett & Le, 2022). Typically, the delegates reported that VET is seen as a 'second best' option for young people. It is the option for those who are less educated and competent, for those who failed at school or with a profile associated with migrant communities (i.e., the Netherlands), or for 'lower castes' (i.e., India) as expressed by delegates from those countries. These perceptions have contributed to a negative media image, low self-esteem among VET students, and for young people or their parents preferring other options in upper secondary or post-secondary schooling. Some delegates from African countries also reported that employers have high (i.e., unrealistic) demands and want employees with degrees, thereby reinforcing young people to seek pathways to HE. Unsurprisingly, VET is sometimes viewed as a dead-end and there is a lack of clarity of the worth of VET. Noteworthy is that, in some countries (i.e., Saudi Arabia and the Netherlands), HE institutions are now offering degrees referred to as 'applied learning', making it more difficult to attract students to VET programmes that are perceived to be lower level than applied learning degrees in HE. Even in Switzerland where different educational pathways leading to equally rewarding job outcomes are a particular strength of the VET system, concern has grown that VET graduates without tertiary level-degree might be pushed into lower-quality jobs and careers with limited opportunities to learn and advance (Stalder & Lüthi, 2022).

Vietnam is a country which manifests all the above unfavourable perceptions of VET (Le, 2022). For example, parents with farming background would sell their land and properties (if any) to pay for their children to obtain entrance into universities in metropolitan areas. Consequently, many young people are obliged to take the university option, which may not be the preferred post-school pathway or not aligned with their capacities and interests. Another consequence is limitations in career prospects in certain occupational areas. For example, in hospitality workplaces, HE graduates competed with VET graduates for the same basic operational level positions because there were limited higher-level positions available. Many HE graduates enrol in VET programs for further skills training due to the lack of employment opportunities in the fields they were trained in through HE programs. However, VET was not perceived as an attractive post-school option. The reality is that university entry is the default post-school option. In a family- and communityoriented Confucian society such as Vietnam, teachers' and parents' own experiences and aspirations were central in shaping the kinds of advice given to children. Teachers were quite candid about their preferences for their students to progress onto HE and that VET was a less desirable outcome and only for low academic achievers. This preference was exercised institutionally as part of their professional obligations. Parents' aspirations of clean and high-status occupations for their children seemed to be the product of societal sentiments privileging university pathways and preference and expectation of parents.

In an Australian investigation, Hodge et al. (2022), analyse student interview data and report wide variation in level of certainty about post-school options among students and parents. The degree to which students and their parents were informed

about options, including the nature of occupations, and what educational pathways lead to particular occupations, were all factors of certainty in decision-making. These data also pointed to a tendency to favour higher education pathways when level of uncertainty was higher. At the same time, limited or distorted information about pathways and occupations facilitate influence of societal sentiments on decision-making. Teachers were well-informed about pathways that reflected their own experiences. They often articulated an awareness of the constraints on student decision-making arising from government, education system or school policy that favoured higher education pathways and/or undermined the image or efficacy of vocational education as a viable option for young people. From survey analyses, Choy et al. (2022) report a large disparity in perceptions and perspectives of schoolaged students and adults about key aspects of decision-making about post-school pathways. These findings confirm that regardless of whether the adult is a schoolteacher, a parent or a VET educator, their perceptions and perspectives may be removed from those of students. For instance, in their study teachers and parents' (adult groups) ranking of desirable post-school outcomes for young people was at variance from rankings by young people. This divergence implies that the bases on which adults, including parents and teachers, provide advice is not necessarily consistent with the goals of young people. Yet, it is these adults who are most likely to influence young people's decision-making about post-school pathways. The expression of personal preference of the adults was seemingly predominant in place of impartiality about diverse post-school pathways. That is, the advice adults have given to students is often based on their preference arising from personal experiences instead of being informed by knowledge and understanding about diverse post-school options and pathways. The difference in preferences by young people and those whose advice shape their decision-making may potentially limit young people's understandings and consequently their preference for post-school options and occupations.

Common to the contributions addressing decision-making was the influence of teachers or guidance counsellors with in-depth knowledge about VET as well as the occupations it serves. When discussing the reforms to enhance the Danish VET system, Aarkrog (2022) highlights that two issues are important: the students' perception of the training environment and their ability for decision-making. Based on qualitative data from two research projects, Aarkrog (2022) reports that Danish VET students perceive the teacher to be the central factor in a conducive training environment, particularly emphasising that teachers should be a professional role model, engage in the students' professional development and encourage and facilitate activities that strengthen their wellbeing. Furthermore, many students are weak at making rational, well considered and sustained decisions regardless of changes in the training environment. However, at the same time in the training environment, in particular the teacher, can positively influence the student's decision-making. The teacher is a strong pull factor ensuring that the student complete the VET programme. Furthermore, the teacher can play a significant role in guiding the students during the decision-making process as well as developing the students' competency in decision-making. This competency is central in relation to reaching the four targets (i.e., more students should enrol in VET; more students should complete VET; VET should challenge all students to become as skilled as possible; and strengthening the trust in VET; and student well-being at VET colleges should be strengthened) and thereby enhancing the standing of VET.

In predominantly work-based VET systems, employers play a particular role in strengthening and maintaining the standing of VET. Exploring the situation in Switzerland, Stalder and Lüthi (2022) argue that two strategies help ensure VET pathways remain attractive: providing apprentices with inducive and wellcoordinated learning resources in workplaces and schools; and initial VET (IVET) graduates with jobs and career options that are equally promising as those of university graduates. In a study with apprentices and graduates, Stalder and Lüthi (2022) report that apprentices with the most favourable learning conditions in workplaces and schools were the most satisfied with their training and also most committed to the occupation they had learned. Moreover, a couple of years later, they looked back at their career more positively than other learners. In general, employers and teachers contribute significantly to creating conducive learning settings. However, whether and how employers designed workplaces as good places for learning seem especially important. In addition, the study with graduates suggests that IVET graduates who later obtained a higher education qualification had jobs with better learning and further training opportunities than those without additional qualifications. Aiming at maintaining the high standing of VET, Stalder and Lüthi (2022) recommend that access to higher and further education and training should be facilitated. Moreover, workplaces should offer possibilities for learning, personal growth, and positive career development to all employees and students or apprentices – independent of the level of qualifications.

Conclusions

Evident across these contributions is that there is an intertwining between institutional and personal factors, that is, practices of people who have an influence upon the decision-making of young people about post-school pathways. Central here is the enhanced aspirations among many students and parents for university-bound pathways rather than VET, regardless of the education systems in different countries. The massification of HE and issues with occupational skill development in VET seem to reinforce the HE-VET divide. The consequences are that increasing numbers of young people are engaging in HE courses with deleterious effects on VET and the occupations it serves (Billett, 2014). Yet, research shows that decision-making by these young people is not always wholly informed and helpful. Indeed, the changing preference to engage in HE seems to be a product of a range of broad social factors, manifested by the practices that occur within schools, families and interactions with familiars. Common to the contributions in this book is the disparity in views of young people and adults (i.e., parents, teachers) about the key aspects of decision-making and preference for post-school pathways. Teachers and parents

play an important role in mediating the decision-making process. However, it is the interplay between societal factors and personal practices that lead to decision-making, and it is these that collectively are shaping preferences away from participating in VET and the occupations it serves. The current concerns and strategies in this book highlight the need for considerations regarding policies goals and initiatives, curriculum and practices, and information about VET and occupations its serves. These are discussed in more detail in Aarkrog, Billett and Hodge (2022) in this volume.

References

- Aarkrog, V. (2020). The standing and status of vocational education and training in Denmark. Journal of Vocational Education and Training, 72(2), 170–188. https://doi.org/10.108 0/13636820.2020.1717586
- Aarkrog, V. (2022). Chapter 7: The significance of learning environment and decision-making for enrolment in and completion of VET: A Danish case. In S. Billett, B. E. Stalder, V. Aarkrog, S. Choy, S. Hodge, & A. H. Le (Eds.), The standing of vocational education and the occupations it serves: Current concerns and strategies for enhancing that standing. Springer Nature.
- Bedoui, M. (2019). Work-based learning in Algeria. European Training Foundation. https://edmsp1.ilo.org/KSP/en/Details/?dn=EDMSP1_243026
- Billett, S. (2014). The standing of vocational education: Sources of its societal esteem and implications for its enactment. *Journal of Vocational Education and Training*, 66(1), 1–21. https://doi.org/10.1080/13636820.2013.867525
- Billett, S. (2020). Perspectives on enhancing the status of vocational education and the occupations it serves. *Journal of Vocational Education and Training*, 72(2), 161–169. https://doi.org/10.108 0/13636820.2020.1749483
- Billett, S., & Le, A. H. (2022). Chapter 4: Improving the standing of VET: Perspectives from countries with developing economies. In S. Billett, B. E. Stalder, V. Aarkrog, S. Choy, S. Hodge, & A. H. Le (Eds.), *The standing of vocational education and the occupations it serves: Current concerns and strategies for enhancing that standing*. Springer Nature.
- Billett, S., Aakrog, V., Hiim, H., Stalder, B. E., & Nokelainen, P. (2018). Enhancing the standing of vocational education and the occupations it serves: A symposium. In C. Nägele & B. E. Stalder (Eds.), Trends in vocational education and training research. Proceedings of the European Conference on Educational Research (ECER), Vocational Education and Training Network (VETNET) (pp. 87-94). VETNET. https://doi.org/10.5281/zenodo.1319640
- Billett, S., Choy, S., & Hodge, S. (2020). Enhancing the standing of vocational education and the occupations it serves: Australia. *Journal of Vocational Education and Training*, 72(2), 270–296. https://doi.org/10.1080/13636820.2020.1751247
- Billett, S., Choy, S., Hodge, S., & Le, A. H. (2022a). Chapter 15: Investigating enhancing the standing of vocational education and the occupation it serves: Purposes, processes and phases. In S. Billett, B. E. Stalder, V. Aarkrog, S. Choy, S. Hodge, & A. H. Le (Eds.), The standing of vocational education and the occupations it serves: Current concerns and strategies for enhancing that standing. Springer Nature.
- Billett, S., Dymock, D., Choy, S., Hodge, S., & Le, A. H. (2022b). Chapter 18: Practical strategies and distributed responsibilities: Enhancing the standing of vocational education and the occupation it serves. In S. Billett, B. E. Stalder, V. Aarkrog, S. Choy, S. Hodge, & A. H. Le (Eds.), The standing of vocational education and the occupations it serves: Current concerns and strategies for enhancing that standing. Springer Nature.

Billett, S., Dymock, D., Hodge, S., Choy, S., & Le, A. H. (2022c). Chapter 6: Shaping young people's decision-making about post-school pathways: Institutional and personal factors. In S. Billett, B. E. Stalder, V. Aarkrog, S. Choy, S. Hodge, & A. H. Le (Eds.), The standing of vocational education and the occupations it serves: Current concerns and strategies for enhancing that standing. Springer Nature.

- Cedefop. (2014). Attractiveness of initial vocational education and training: Identifying what matters (Cedefop Research Paper No. 39). Publications Office of the European Union. https://www.cedefop.europa.eu/files/5539_en.pdf
- Cho, M. K., & Apple, M. (1998). Schooling, work and subjectivity. *British Journal of Sociology of Education*, 19(3), 269–291. https://doi.org/10.1080/0142569980190301
- Choy, S., Le, A. H., Billett, S., & Hodge, S. (2022). Chapter 17: Surveys of students, parents and teachers (Phase 2). In S. Billett, B. E. Stalder, V. Aarkrog, S. Choy, S. Hodge, & A. H. Le (Eds.), *The standing of vocational education and the occupations it serves: Current concerns and strategies for enhancing that standing*. Springer Nature.
- Clement, U. (2014). Improving the image of technical and vocational education and training. Federal Ministry for Economic Cooperation and Development. https://www.dcdualvet.org/wpcontent/uploads/2014_GIZ_Improving-the-Image-of-Technical-and-Vocational-Education-and-Training_A-synthesis.pdf
- Deissinger, T. (2022). Chapter 5: The standing of dual apprenticeships in Germany: Institutional stability and current challenges. In S. Billett, B. E. Stalder, V. Aarkrog, S. Choy, S. Hodge, & A. H. Le (Eds.), *The standing of vocational education and the occupations it serves: Current concerns and strategies for enhancing that standing*. Springer Nature.
- Deissinger, T., & Ott, M. (2016). Tertiarisation of vocational education and training and its implications Problems and issues in Germany and France. In S. Bohlinger, T. K. A. Dang, & M. Klatt (Eds.), *Education policy: Mapping the landscape of scope* (pp. 268–296). Peter Lang. https://doi.org/10.3726/978-3-653-05044-8
- El-Aswami, A. (2018). Reviewing work-based learning (WBL) programmes for young people in Egypt. UNESCO. https://en.unesco.org/sites/default/files/egypt_0.pdf
- Goldthorpe, J. H. (1996). Problems of "meritocracy". In R. Erikson & J. O. Jonsson (Eds.), *Can education be equalised?* (pp. 255–287). Westview Press.
- Gore, J., Ellis, H., Fray, L., Smith, M., Lloyd, A., Berrigan, C., Lyell, A., Weaver, N., & Holmes, K. (2017). Choosing VET: investigating the VET aspirations of school students. NCVER. https://www.ncver.edu.au/__data/assets/pdf_file/0028/1142749/Choosing-VET-investigating-the-VET-aspirations-of-school-students.pdf
- Haybi Barak, M., & Shoshana, A. (2020). Separatist biopolitics: the dual discourse of the vocational education policy in Israel. *Journal of Vocational Education & Training*, 72(2), 297–314. https://doi.org/10.1080/13636820.2020.1721734
- Hiim, H. (2020). The quality and standing of school-based Norwegian VET. *Journal of Vocational Education and Training*, 72(2), 228–249. https://doi.org/10.1080/13636820.2020.1734062
- Hiim, H. (2022). Chapter 10: The quality and status of school-based Norwegian VET. In S. Billett,
 B. E. Stalder, V. Aarkrog, S. Choy, S. Hodge, & A. H. Le (Eds.), The standing of vocational education and the occupations it serves: Current concerns and strategies for enhancing that standing. Springer Nature.
- Hodge, S., Billett, S., & Choy, S. (2022). Chapter 16: Influences on post-school decision-making:
 Perspectives of school students, parents, teachers (Phase 1). In S. Billett, B. E. Stalder,
 V. Aarkrog, S. Choy, S. Hodge, & A. H. Le (Eds.), The standing of vocational education and the occupations it serves: Current concerns and strategies for enhancing that standing.
 Springer Nature.
- James Relly, S. (2021). The political rhetoric of parity of esteem. *Oxford Review of Education*, 47(4), 513–528. https://doi.org/10.1080/03054985.2020.1866522
- James Relly, S. (2022). Chapter 3: Understanding the purpose and standing of technical and vocational education and training. In S. Billett, B. E. Stalder, V. Aarkrog, S. Choy, S. Hodge, &

- A. H. Le (Eds.), The standing of vocational education and the occupations it serves: Current concerns and strategies for enhancing that standing. Springer Nature.
- Le, A. H. (2022). Chapter 11: Perspectives on informing post-school pathways: A Vietnamese case study. In S. Billett, B. E. Stalder, V. Aarkrog, S. Choy, S. Hodge, & A. H. Le (Eds.), *The standing of vocational education and the occupations it serves: Current concerns and strate-gies for enhancing that standing*. Springer Nature.
- OECD. (2013). OECD skills outlook 2013: First results from the Survey of Adult Skills. OECD Publishing, http://dx.doi.org/10.1787/9789264204256-en
- Pantea, M. C. (2022). Chapter 14: Elevating the standing of vocational education and training in Romania. In S. Billett, B. E. Stalder, V. Aarkrog, S. Choy, S. Hodge, & A. H. Le (Eds.), *The standing of vocational education and the occupations it serves: Current concerns and strategies for enhancing that standing*. Springer Nature.
- Pilz, M., & Ramasamy, M. (2022). Chapter 9: Attractiveness of vocational education and training in India: Perspectives of different actors with a special focus on employers. In S. Billett, B. E. Stalder, V. Aarkrog, S. Choy, S. Hodge, & A. H. Le (Eds.), The standing of vocational education and the occupations it serves: Current concerns and strategies for enhancing that standing. Springer Nature.
- Rintala, H., & Nokelainen, P. (2022). Chapter 8: Promoting the standing of VET in Finland: Balancing amongst the different aims of VET. In S. Billett, B. E. Stalder, V. Aarkrog, S. Choy, S. Hodge, & A. H. Le (Eds.), *The standing of vocational education and the occupations it serves: Current concerns and strategies for enhancing that standing*. Springer Nature.
- Stalder, B. E., & Lüthi, F. (2020). Job resources and career success of IVET graduates in Switzerland: A different approach to exploring the standing of VET. *Journal of Vocational Education and Training*, 72(2), 189–208. https://doi.org/10.1080/13636820.2020.1721735
- Stalder, B. E., & Lüthi, F. (2022). Chapter 12: Enhancing the standing of VET in Switzerland. In S. Billett, B. E. Stalder, V. Aarkrog, S. Choy, S. Hodge, & A. H. Le (Eds.), The standing of vocational education and the occupations it serves: Current concerns and strategies for enhancing that standing. Springer Nature.
- UNESCO. (2019). Work-based learning programmes for young people in the Arab region: A comparative and longitudinal analysis. https://unevoc.unesco.org/pub/yem_regional_overview_work_based_learning.pdf
- UNESCO-UNEVOC. (2018). Short summary of the Virtual Conference on improving the image of TVET: Making TVET attractive to youth. https://vocationsandlearning.files.wordpress.com/2019/10/vc_synthesis_21_final.pdf
- Veillard, L., & Dijon, A. (2022). Chapter 7: Alternance training as a way to improve attractivity of vocational education program in France. In S. Billett, B. E. Stalder, V. Aarkorg, S. Choy, S. Hodge, & A. H. Le (Eds.), The standing of vocational education and the occupations it serves: Current concerns and strategies for enhancing that standing. Springer Nature.
- Wolter, A., & Kerst, C. (2015). The 'academisation' of the German qualification system: Recent developments in the relationships between vocational training and higher education in Germany. *Research in Comparative and International Education*, 10(4), 510–524. https://doi.org/10.1177/1745499915612188
- Wolf, A., Dominguez-Reig, G., & Sellen, P. (2016). Remaking tertiary education: Can we create a system that is fair and fit for purpose? *Education Policy Institute*, London. http://epi.org.uk/report/remaking-tertiary-education-can-wecreate-a-system-that-is-fair-and-fit-for-purpose/
- Wyman, N., McCrindle, M., Whatmore, S., Gedge, J., & Edwards, T. (2017). *Perceptions are not reality: Myths, realities & the critical role of vocational education & training in Australia*. Skilling Australia Foundation.

Enhancing the Standing and Statusof Vocational Education



Stephen Billett, Steven Hodge, and Vibe Aarkrog

Abstract This chapter draws on the contributions of the reviews and country-based studies in this volume to identify the bases for and ways in which the standing of vocational education (VET) and the occupations it serves can be enhanced so it is positioned as a more worthwhile, viable and legitimate post-school pathway. Acknowledging that the likely responses will be shaped by the educational systems in nation states and regions, where and how VET is positioned within them and the kinds and range of influences shaping young people and their parent and familiars' decision-making about VET. Across these countries, both with developed and developing economic bases, it would seem that high aspirations and, increasingly, expectations of young people and their parents and other familiars is quite consistently positioning VET as being an inferior postschool option to participation in higher education (HE) and one that is seen as being posterior to it in terms of status, attractiveness and educational outcomes. Addressing and rebutting such strong societal sentiments about the forms of work and an educational provision that are seen as undesirable will likely require addressing these circumstances locally and regionally. As VET is strongly aligned with occupations, making it more interesting, engaging and attractive to young people is also closely linked with the standing of occupations. So, there is a need to find ways to redress the concerns within the community and address the factors which limit the ability of VET to deliver its full potential to students, communities and nations. So, in sum, this chapter sets out this case drawing upon the collective contributions in this volume and a wider range of literature that addresses these challenges.

Keywords Zone of influence · Decision-making support · Local factors · Distal influences · Proximal influences · Strategies · Approaches

S. Billett (\boxtimes) · S. Hodge

Griffith University, Brisbane, QLD, Australia

e-mail: s.billett@griffith.edu.au

V. Aarkrog

Danish School of Education, Aarhus University, Aarhus, Denmark

© The Author(s), under exclusive license to Springer Nature Switzerland AG 2022

S. Billett et al. (eds.), *The Standing of Vocational Education and the Occupations It Serves*, Professional and Practice-based Learning 32, https://doi.org/10.1007/978-3-030-96237-1_2

Informing Young People's Decision-Making About Post-school Pathways

The decisions that young people make about post-school pathways are becoming increasingly important because of the implications for: (i) their personal educational and employment trajectories and goals, (ii) the effective utilisation of educational resources, and (iii) meeting a range of needs associated with developing the occupational capacities required to realise communities' and nation states' social and economic goals. Globally, there are concerns that young people's preferences for universities as default post-school pathways and desirable forms of work (i.e., clean, high status, classified as professional) are reducing their participation in vocational education and training (VET) and the occupations it serves (Billett, 2014; Billett & Le, 2022; (UNESCO-UNEVOC, 2018b). The preference for participating in higher education (HE) over VET is leading to skill shortages (Universities Australia, 2008; Wolf et al., 2016), poor employment outcomes for university graduates (Nägele & Stalder, 2018) and injudicious personal and societal investments in tertiary education provisions. Some accounts identify institutional and personal factors shaping that decision-making as failing to fully and impartially inform young people's choices within the senior years of schooling and about post-school pathways (Clement, 2014; UNESCO-UNEVOC, 2018b). Certainly, across both countries with advanced industrial and developing economies, there is a growing pattern of young people viewing VET and the occupations it serves as being undesirable and not aligned with their aspirations regardless of whether VET is based in compulsory education (i.e., schooling) or as a post-school (i.e., tertiary) educational provision (UNESCO-UNEVOC, 2018b). This sentiment is seemingly being buoyed by the aspirations of those who are close or proximal to these young people, such as parents, schoolteachers, other familiars, including what is privileged and championed by them in schooling (Cho & Apple, 1998; Clement, 2014; Fuller et al., 2014; Parliament of Victoria, 2018). Moreover, at a greater distance or distally, these studies note that public discourses, portrayals in the print, broadcast and electronic media are also potentially favouring the kinds of occupations arising from university education over those that VET graduates secure (Lasonen & Manning, 2000). Of course, societal preferences for particular kinds of work have long existed and influenced views of their worth in communities and what kinds of educational provision they warrant and have long been projected by social institutions (Billett, 2011, 2014). Yet, currently and globally, there appears to be a growing and unprecedented disaffection with VET and the occupations it serves as viable post-school options. While heightened aspirations about the kinds of work in which young people wish to engage are welcomed, understandable and encouraged, there now needs to be even greater attention to decision-making about their post-school pathways and intended career destination to ensure their choices are well informed and VET is not precluded.

A consequence of such heightened aspirations is an undermining of the capacity of VET to attract students with the level of capacities (e.g., achievement) for the kinds of technical occupations that enterprises in advanced industrial societies require to provide for the social and economic needs of those societies (Wolf, 2011; Wolf et al., 2016). It also weakens the prospects of countries seeking to develop their economic base and move away from reliance of primary production such as mining or petro-chemical sector to establish viable, enduring, sustainable and more environmentally protective economic bases. These issues have also been highlighted in the current era of a pandemic and growing geopolitical tensions which require greater self-reliance by nation states. Countries across the world have been left behind in the provision of health care and their capacities to exercise national sovereignty. The point here is that beyond personal choice, there are important and, potentially, existential risks for nation states in not being able to generate the kinds and ranges of occupational capacities that can meet their needs. So, all these circumstances warrant substantial responses and ameliorations.

As foreshadowed, a range and an inter-weaving of influences and factors are currently transforming these aspirations into expectations (Clements, 2014), which may be difficult to fulfil. Consequently, there is a need to understand what is driving this change in young people's decision-making to identify how, in the future, it can be informed and in impartial ways so that VET and the occupations it serves can be viewed as viable and worthwhile post-compulsory school options, including at the upper secondary and tertiary level that exist in many European countries. A review of literature identifies factors and processes that inform and shape young people's decision-making about post-school pathways and indicates the complex of institutional factors and personal practices that influences young people's decision-making about post-school pathways (see Billett et al., 2022a, b in this volume). That review also identifies what might be viewed as being worthwhile, viable and attractive post-school pathways. It also elaborates the complex of personal practices shaping young people's decision-making about post-school pathways and discusses how these can be more effectively mediated in schools, by parents and teachers and by the actions of government, to inform that decision-making so that VET can be considered as a viable post-school option. Personal practices are taken here as what people do and how they make choices and decisions (Billett, 2009). These are shaped by what they know, can do and value. However, whilst delineating institutional factors and personal practices, this is not to set them apart as separate and isolated categories, as they are intertwined and interdependent. The delineation of these factors and practices, however, allows their relationships to be better understood and, potentially, actions taken to mediate their specific contributions to this decision-making. Indeed, effective responses to redressing this issue can best progress through actions that account for the complex of factors that shape young people's decision-making about post-school pathways. And it progresses in ways informed impartially, considered carefully, and supported in proximal interactions and that extend to mediating both the helpful and unhelpful societal suggestions advanced through social institutions such as schools, media which includes diverse and conflicting societal sentiments that project orthodoxies about the standing of occupations. So, it is the mediation of these sentiments albeit suggested proximally or projected by institutional norms, forms and practices that becomes important. For instance, whilst governments encourage young people to participate in VET, other suggestions are that this is not a socially desirable option. The intentional or unintentional guidance provided by parents, teachers and peers can mediate these conflicts in ways that amplify or mute them. It is at this inter-personal level and through interactions with these familiars that perhaps offers the best way to mediate unhelpful societal suggestions and sentiments.

The chapter sets out this case drawing upon the collective contributions to this volume and a wider range of literature that addresses these challenges. Overall, it proposes that as the standing of both, the educational provision of vocational education and the occupations it serves, are premised upon factors being exercised at national and local levels. Consequently, responses to bring about change within them need to be directed at these two levels and that given these comprise distinct zones of influence, this might be a useful starting premise. Accordingly, it is advanced that actions at these two levels (i.e., distally and proximally) are required to bring about these kinds of changes and that there are different approaches and strategies needing to be enacted at both. The chapter commences with a brief rehearsal of the need for actions being undertaken to enhance the standing of VET and its associated occupations. These are discussed in terms of the policy aims and goals intended to be achieved, followed by the curriculum initiatives that are being directed towards assisting impartial advice that achieves those outcomes. Much of this discussion is directed towards providing impartial, comprehensive and targeted advice to young people, and their parents as well as their teachers as these familiars are highly influential in decision-making in which these young people engage. The central concern is to mediate that decision-making in ways through the provision of impartial and informed advice.

Presaged here is the emphasis on this guidance that is largely interpersonal (i.e., between the young person and these familiars). It is they who variously give carriage to or can moderate societal suggestions projected by institutions (e.g., schools, government, media) that represent a less direct or distal guidance. These comprise, at a national level, the preferences generated by societal and cultural sentiments that are suggested through text, media pronouncements and imagery. As Cho and Apple (1998) show, when societal sentiments are given carriage by parents, teachers and peers, governmental efforts to bring about change become very difficult to realise. So, efforts to engage young people in manufacturing work struggled to gain much purchase, except for those young people who had a specific motive for engaging in that work. Conversely, when the suggestion is supported in the community, there is evidence that such changes can be realised. Stalder and Lüthi's (2020) account of young people engaging in degrees that limited their career prospects led to a reform of the educational system that helped maintain the standing of VET in Switzerland because it enjoyed community support. Hence, what might be promoted distally by government (i.e., encouraging young people to engage in VET) needs to be supported and mediated by industry, schools and VET institutions, and given carriage proximally by parents, teachers and other familiars. As depicted in Fig. 2.1, there are distal institutional factors that contribute to societal sentiments about VET and the occupations it serves, and also proximal zones of influence comprising parents,

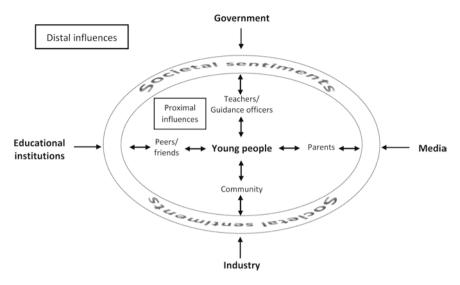


Fig. 2.1 Distal and proximal zones of influence and societal sentiments on VET

teachers, familiars and community play key roles in influencing and mediating young people's decision-making associated with post-school pathways and bring about change in them. So, it is the mediation of the sentiments by those familiars that engage closely and influence that are crucial to avoid. That is to avoid what Cho and Apple (1998) identified as resisting efforts to enhance occupational status and promote its standing as Stalder and Lüthi (2020) found.

It is this set of local and predominantly inter-personal interactions and influences that are likely to be central to bringing about redressing the relative low standing of VET and the occupations it serves.

Redressing the Low Standing of VET and the Occupations It Serves

As reported both here and elsewhere, the societal sentiments and discourses across countries with both developed industries (Cedefop, 2017) and developing economies (UNESCO-UNEVOC, 2018a) appear to be quite consistent, in positioning VET as a relatively unattractive educational option either within compulsory schooling or post-schooling option, based in part, but not wholly on the standing of the occupations it serves. There have been a few exceptions, however. In a conference organised by UNESCO in 2017, a representative from Brazil mentioned that VET had a positive status as there are so few publicly-funded places available. Also, in Switzerland, VET is held in relatively high esteem and comprises the default post-school pathway (Stalder & Lüthi, 2020), and the case is also made for Germany

(Deissinger, 2022, this volume). Elsewhere, and even in countries that value skilled workers, VET is often viewed as an option for those without the ability to progress to a university education (Cedefop, 2017) and is best undertaken by those whose only option is to use their hands to earn a living (UNESCO-UNEVOC, 2018a). For instance, French republicanism focuses on merit as evidenced through educational achievement and favouring high levels of certification, for instance from prestigious educational institutions and, principally, universities (Veillard, 2015). Societal sentiment such as these and accompanying discourse that is difficult to negotiate around has implications for the attractiveness of VET (Haybi-Barak & Shoshana, 2020), and how it is positioned as an educational sector and the kind of support it receives both materially and is viewed societally.

Some commentators claim that the case for achieving parity between VET and HE is closed (James-Relly, 2022, this volume). Even if this is correct, a societal discourse that is open to and inclusive of VET is now required for not only the viability of the provision of VET but also for the sense of self of those who work in the sector and those who are VET students as James-Relly (2022) retorts. Noteworthily, Stalder and Lüthi (2020) indicate how personal resources that are central to securing effective job outcomes include individuals' appraisal of their worthiness, effectiveness and capabilities as a person. Persistent societal sentiments that suggest VET and the occupations it serves are of low social standing works against these important resources as Haybi-Barak and Shoshama (2020) and Veillard (2015) report. As noted, French republicanism emphasises the importance of academic merit as measured through the achievement of high levels of educational qualifications and participation in elite institutions at school and university level, and this is entrenched in processes for selecting employees and career advancement. This French societal sentiment works against VET being taken as viable and worthwhile post-schooling educational provision (Veillard (2015, 2022). In this vein, Stalder and Lüthi (2020) make the point that all too often the standing of VET is measured in terms of student enrolment rate, employer engagement or prestige. Yet, other measures such as those that support positive learning outcomes for young people, including pathways to HE become salient. Here, Aarkrog's (2020) conclusion about institutional level strategies not being sufficient, is very evident. Instead, there needs to be coherent policy goals and initiatives that are enacted systematically to bring about change. Yet, that enactment seems most likely to be potent when it is undertaken at that local level through close or proximal interactions. It is these that ultimately mediates young people's decision-making.

Policy Goals and Initiatives

Although the low standing of VET and the occupations it serves are global concerns, how it is manifested and/or its impact and potential means of redressal in the form of policy goals and initiatives are likely to be quite country distinct. One key divide is whether it is undertaken largely as a stream within schooling (i.e.,

compulsory education) or as a post-schooling option in dedicated tertiary education institutions. Even here, the concept of 'schools', their educational purposes, the age range of students and resources are quite distinct across nation states, as are the issues of redressing the relative low standing of VET. This then leads to quite distinct policy goals and initiatives. For instance, in Norway (Hiim, 2020) and Denmark (Aarkrog, 2020), there have been efforts to improve retention in VET programmes that are a common form of post-school education. Hence, initiatives to improve the standing of VET are directed towards improving its quality. In Norway, these include specific VET teacher education programs, curriculum reforms and to align more closely what is taught and experienced in VET programs, for instance, to aligning VET provisions with the requirements of work in that country's workplaces (Hiim, 2020). In Finland, there is a concern also about addressing the declining numbers of school-leavers progressing directly into VET. A large component of the VET student cohort are adults whose engagement in initial occupational preparation is often engaged with in early adulthood (Rintala & Nokelainen, 2020). It follows that a key focus of policy goals in Finland is often associated with the quality of the learning experience and how this can assist students and graduates develop the kinds of capacities that will be effective in workplaces (Rintala & Nokelainen, 2020). In Denmark, the response to this kind of problem is on elevating the standing of VET through making entry requirements more demanding and making the institutions and programs more attractive to young people (Aarkrog, 2020). However, the consequence appears to have been a less inclusive provision of education, and one that excludes socially marginalised students, including those from migrant backgrounds. In Spain, initial reforms of VET were directed towards addressing issues of low literacy of those participating in VET institutions (Martínez-Morales & Marhuenda-Fluixá, 2020). Hence, the need to integrate VET provisions with schooling in which the academic curriculum is being enacted there. Later, curriculum initiatives were enacted to make the content and focus less on 'academic' considerations and more on those associated with the requirements of work.

Also, to overcome views that VET is a 'dead-end' pathway, arrangements are being implemented to assist articulation from these programs to university entrance (Billett, 2020). Unlike other countries, participation is not a key policy concern in Switzerland, instead it is the kind and range of employment outcomes for VET graduates (Stalder & Lüthi, 2020). Central among these is the ability to progress to HE leading to introducing VET qualifications with degree level outcomes and achieving work-related outcomes for VET students that are comparable with those who participated directly in HE (Stalder & Lüthi, 2020). These outcomes include comparable levels of salary and measures of work quality (i.e., discretion and collegiate interactions) that make these kinds of employment attractive. The standing of qualifications at the commencement of working life is a key determinant for productive career progression and quality of work (Stalder & Lüthi, 2020). As HE qualifications become common, concerns have grown that VET graduates without tertiary level-degree might be pushed into lower-quality jobs and careers with limited opportunities to learn and advance careers. Stalder and Lüthi's (2022) contribution in this volume partly supports these concerns. They propose that to maintain the high standing of VET, the quality of apprenticeship must be ensured, access to higher and further education and training must be facilitated, and workplaces should offer possibilities for learning, personal growth, and positive career development to all employees—independent of the level of qualifications.

Also, in this volume, Billett and Le (2022) report recommendations of delegates from countries with developing economies. These delegates suggest that single interventions such as those taking place within schools or VET institutions will be unsuccessful without broader engagement by national governments, the community, including employers. This includes seeking to inform and change the perspectives of young people and their parents. Committed and long-term government action is also likely to be required. So, just as the problem of the relatively low standing of VET is a product of a complex of societal and local factors, it can only be addressed by a similar range of initiatives seeking to redress those problems. Similarly, in the Australian investigation reported across a number of chapters in this volume, Billett, Choy, Hodges and Le consulted with schools and policy and practitioner groups to identify strategies to promote the standing of VET. They suggested a range of strategies that might be enacted by VET institutions, schools, and government and business. These strategies are proposed as means by which actions can be taken to promote the image, attractiveness and viability of VET as a worthwhile post-school pathway. They emphasise the important role of government and industry in this process. Schools and VET institutions reportedly do not have the capacity or resources to inform, let alone advise students individually about the range and kinds of occupations and available post-school educational provisions. Moreover, if the VET institutions were to promote these options, there is a risk that this would be seen as institutional marketing, not public education. Therefore, national and local leadership from government and industry is required, to demonstrate, broadcast and champion the significance of such occupations and the demands for and requirements of skilful work associated with them. As in other countries, there is likely to be a need for industry sector-level initiatives to enhance the attractiveness of VET.

Deissinger (2022) in his contribution to this volume suggests that both the reduced role of the state, the importance of "shared practices" in the public sphere, including chambers, employers and trade unions, the mandatory character of part-time course attendance in the vocational school and, above all, the concept of "skilled occupations" underline the pedagogical legitimation of the German "institution-based approach" in VET, albeit distally. Hence, he points to the shared carriage of the responsibility for and actions associated with legitimating VET as a viable educational pathway. Combining the understanding of the purposes of VET with the elements needed for a successful skills system is a good starting point for policymakers to understand, to resource, and then meaningfully integrate policy into a wider system of education and workforce development, thus giving it genuine standing as James Relly (2022) proposes in this volume. Underpinning this imperative for standing of the VET pathway is the understanding that quality of provision and teaching standards are also inextricably linked to esteem. Consequently, employers, education and training providers, and policy makers must work together

to elevate its standing, through being clear about goals, procedures and processes to achieve these outcomes. This requires a long-term strategic approach where a skills economy stands alongside the knowledge economy considering the entire tertiary landscape where skills are developed, the relationship between productivity and the shifting dynamics between skills supply and demand, the changing nature of work, spatial dynamics, and local economic variance. Having a VET pathway that has high standing in society matters because the young people taking that pathway matter. The implications, of course, are wider and include national prosperity, and the ability to be self-reliant, thereby protecting sovereignty. In this regard, and within this volume, Pantea (2022) calls for a more consolidated understanding of the political economy of VET and issues of social justice. Here also, Rintala and Nokelainen (2022) propose that instead of reforms and development projects, long-term development focused on improving quality is needed and achieved by the support of stable funding. Implementing measures to promote the standing of VET is not easy, as it requires finding a balance between different target groups and the varying aims of VET as a promoter of social inclusion and economic growth, and between HE pathways and employment are all initiatives that can guide decision-making through distal means.

Curriculum Initiatives and Practices

Curriculum initiatives associated with enhancing the status of VET also are likely to be country specific depending upon the kinds of goals that are aspired. For instance, in Norway, curriculum initiatives attempting to make the curriculum more theoretically premised were intended to make it more educationally attractive to young people (Hiim, 2020). Moreover, the structuring of an initial broadly focused set of experiences to address a range of industry sectors rather than specific occupations was an attempt to render the curriculum narrowly on just one occupational field. In Denmark, the initiatives include providing youth-orientated educational environments, transitions from VET to HE, improving the quality of training and provision of workplace experiences (Aarkrog, 2020). In Australia, information strategies are being deployed by both federal and state governments to inform students about occupations and VET in ways intended to promote informed and impartial decisionmaking about postschool pathways (Billett et al., 2020). In Spain, a series of reforms were enacted to initially dignify and give greater educational rigour to VET and to make it more relevant to the world of work and occupations it serves (Martínez-Morales & Marhuenda-Fluixá, 2020). Hence, initial reforms were aimed to provide more general education that later was overturned by considerations about modernising the VET provision to make it more occupationally relevant with the guidance of industry stakeholders.

Issues associated with improving pedagogic practices to make students' learning experiences more focused on capacities that will promote their employability including strong conceptual understandings also featured in Finland, Denmark,

Norway and Spain. For instance, in attempts to legitimise VET in Norway (Hiim, 2020), an emphasis on improving teaching quality through a more extended period of preparation has been introduced. Here, there is a specific attempt to address the parity question by providing students with educational experiences that are designed and enacted by occupational experts who are also qualified teachers. The provision of workplace experiences in the curriculum is adopted to enhance the relevance and the provision of authentic work experiences, for instance in Denmark (Aarkrog, 2020). Yet, as with many curriculum initiatives, without actions to identify how to engage young people and their parents at the local level (i.e., proximally), these structures alone may be insufficient. So, whilst governmental action often focuses on enhancing the provision of VET, seeking to align its purposes and processes with the world of work as distal suggestions, unless what is being proposed is going to engage young people and be supported by familiars (e.g. parents and teachers), it may not be very effective (Billett, 2020), hence the need for close guidance by teachers or other familiars that can mediates the various and sometimes conflicting social suggestions through affording informed person-relevant, impartial and fulsome advice. So, whilst governmental action might be top-down, while real and effective change is initiated and has to be supported by people working in the field, that is teachers and trainers.

From the reviews, and following this premise, the empirical evidence provided in this volume suggests that guidance by schools and, in particular, by those who teach in them play a significant role in influencing students' decision-making. This influence is exercised through both every day and specific career development practices, although the nature of information and support can differ. The role of schools in providing information, realistic and personally-focused guidance in decision making, and support to pursue the widest range of options is especially important for low SES students as their parents may have limited knowledge and levels of engagement (Krause et al., 2009). For instance, most Australian students participated in at least one career advice activity during their senior schooling (Rothman & Hillman, 2008). These activities included the distribution of printed textual material (the most common), attendance at talks by tertiary institutions, and individual or group discussions with career advisers. The more activities students participated in the more likely they were to report finding the advice provided as useful. However, Rothman and Hillman (2008) also found that young people who work part-time while at school may have a stronger sense of their career interests and may perceive the worth of school-based career advice differently from those who are not working. In another study, participation in school-based career activities and searching for career information varied between those who aspired to attend university and those who did not (Gore et al., 2015).

In Denmark, a five-day program was introduced into schooling to assist young people make decisions about postschool pathways (Aarkrog, 2020). However, it seems that this is not wholly effective, possibly because the career guidance counsellors were not equipped for the role (Aarkrog, 2020). For students who had decided their occupation, this program did little to change their choice, and for those who have not decided that pathway, it seemed not to be impactful. When appraising

the series of reforms in Denmark, Aarkrog (2020) concludes that these initiatives are not sufficient. That is, intentional initiatives that do not engage or help young people, from their perspective, may be fruitless. This can include initiatives that come at the "wrong moment" (too early or too late in the decision-making process) are not sufficient. From our latest research project, we know that decisions-making is an individual process, every young person follows his or her own pace and is at a different stage in certain moments. The problem with school-based initiatives is often that they are standardised – everybody must follow the same programme and has to do the same tasks at the same timepoint. This does not work.

This extends to whether young people see the occupations that VET prepares them for are worthwhile and worthy of engagement.

There are also reported differences in perspectives between students and educational providers about the worth of career development services in Australian schools (Rainey et al., 2008). Providers claimed they delivered a wide range of services (i.e., career education, information, guidance, advice, placement and referral), but students reported that these services mainly focused on print-based information provided remotely and not processes able to accommodate their needs. Most young people in this study reported a positive view of VET, but improvements in the engagement with broadcasted information about VET were needed. Computerbased sources and experience-based interventions, such as placement and referral were two services that were requested. Noteworthy, in research undertaken ten years later, Galliott (2017) queried the increasing use of online career information and guidance systems in Australia. She notes the use of online resources presupposes that young people possess the agency and capability for problem identification, information searches, the evaluation of alternative solutions, and making rational choices about post-school pathways. She suggested that such resources were more likely to be effective when combined with face-to-face advice that has been echoed elsewhere about the importance of proximal guidance.

Gaylor and Nicol (2016) evaluated an experiential career exploration program by examining Canadian Grades 11 and 12 (i.e., senior secondary) students' motivation and career decision-making self-efficacy. They found that most participants in this program were already intrinsically-motivated about career exploration, but that many of them had concerns about making difficult and seemingly fixed choices about their future careers. While they also found a positive relationship between program completion and career decision-making self-efficacy, they proposed improvements including to customise the process of information and advice by surveying students to identify knowledge gaps and areas of most interest to them. In this volume, Billett et al. (2022a, b) identify a key consideration for close guidance provided by schools is the level of teachers' knowledge of VET. Teachers often base their advice to students, even inadvertently, on their own life experiences, which rarely includes VET in Australia. Yet, students see their teachers as highly influential in career choices. In fairness, teachers often acknowledge no direct experience of VET and an incomplete knowledge of its offerings and enrolment procedures. So, VET institutions themselves can be more pro-active in their links with schools, but schools can also organise familiarisation tours of VET facilities for teachers, as part of teachers' professional development; and equip career advisers and others in the school who take on this role with sufficient knowledge to advise students authentically and individually. Aarkrog (2022) adds, in this volume, that engaged teachers are the most important factor in the training environment and will have an important impact on the students' wellbeing and completion of education, thus consequently for the standing of VET, once more rehearsing the value of proximal guidance.

To address the issue of lack of engagement among a significant proportion of young people, public authorities have sought to make VET more effective in terms of labour market integration and of greater prestige among young people, as captured in the French context by Veillard (2022) in this volume. Among these means, "alternance training", comprising combining periods of training in school and periods of training in the workplace has emerged. Whilst this approach has long been accepted in the German, Austrian, Swiss and Danish system, it is seen as having a specific role to counter a national sentiments that seeks to separate work form education. So it is seen as a way of improving the credibility of training courses with employers and enhancing, their attractiveness to young people. It seems, therefore, that the enhancement of the standing of VET is intimately linked to the upgrading and social desirability of the occupations it serves. Without this, any other measure, including the development of apprenticeships, even if they are a particularly interesting form of training that combines theoretical and practical learning, will have only marginal effects in terms of making these courses more attractive. Hiim (2022) proposes in this volume that a key principle to increase the status and quality of VET is equal opportunities for vocational and academic students in terms of the scope of their interests and levels of their achievement. Another key principle is a holistic organisation of VET where learning and work experience, knowledge, skills, theory and practice are integrated. However, all this needs to be embraced by educational policy and enacted locally in ways that provide an informed basis for decision-making about educational pathways.

It is acknowledged that providing an informed basis is far more than the provision of information. Parents and teachers want their children and students to aspire to achieve at the highest level, to optimise their potential and to offer them the means and choice of being able to fulfil that potential. This is only fair, just and proper. Yet, it seems that central to achieving these outcomes is the provision of comprehensive and impartial advice locally and through close or proximal guidance with familiars (i.e., parents, teachers and peers). Whilst prestigious professions projected may seem outwardly attractive, they can frustrate access to them, and may not necessarily be aligned with young people's capacities and interests. So, being open, informed and being aware of the challenges and risks as well as the aspirations that can be achieved through diverse pathways seems important, fair and just.

Informing About VET and Its Occupations

While many studies provide evidence that the practices of family, particularly parents, and friends are highly influential in decision-making, some caution that this may not always lead to well-informed and personally-appropriate decisions (e.g. Billett et al., 2020). Also, evidence to the Victorian parliamentary inquiry (2018) raised the possibility that a mismatch between parents' understandings of career options (influenced by their own education and employment experiences) and the realities of the labour market could lead to poor decisions. Australian students from a rural background reported a university-developed career development program as being able to provide information that their family, friends, and local networks could not (McIlveen et al., 2012). Similar concerns were raised in relation to the quality of information available in socio-economically disadvantaged communities (Lamb et al., 2018; Webb et al., 2015). So, localised guidance per se may be influential, but can also be unhelpful if it is not adequately comprehensive and aligned to students' interests, needs and capacities.

Consequently, extensive reliance on parents found in the Bisson and Stubley's (2017) survey raises questions about how well-equipped parents are to offer such advice, especially given the findings of a study (Bedson & Perkins, 2006) that only 11% of some 300 parents surveyed felt prepared enough for such a role and 77% admitted they had insufficient knowledge. Phillips (2012) suggested from US experience that there is a need to re-educate parents about the value of occupations that are not high on the social status scale and about the high level of cognitive and manual skills needed in many contemporary VET-related occupations, a perspective shared by Rose (2004), Crawford (2000) and Sennett (2008). In this volume, Billett et al. (2022a, b) suggest that parents are generally not knowledgeable about VET, nor strongly engaged with schools in career choices. They may also not have considered VET as a post-school option for their child/children either through ignorance of its possibilities or as an increasing preference for university studies. Although this issue sits outside the control of schools, there are actions that could be exercised. For example, VET can be promoted as a worthwhile and viable option from when students first enrol, on the assumption that parents/carers are likely to be most engaged at that point, and continually in every year of high school through newsletters, other school communications with parents, career nights, parentteacher interviews, etc.

It seems there is already a growing emphasis on informing high school students about post-school pathways in many schooling systems. Yet, it is important to understand the processes and outcomes of these. Sometimes, this emphasis is on selecting courses for the seniors of schooling and, in other instances it is a process that deliberately seeks to assist in forming and making decisions that has implications beyond the senior schooling years. The great risk is that these processes may come to further fuel the expectation that the default post-school option is HE, rather than questioning such an assumption and offering alternatives. These processes are important, as school students are not always well-informed when making decisions

about subject selection and the pathways available to them in Australian secondary schools (Dalley-Trim et al., 2008). So, again, that support needs to be comprehensive and impartial as much as possible. Even then, the decision-making may not be particularly focused. These researchers found that the three main reasons given for choosing to participate in VET subjects were that they were: i) 'fun', 'enjoyable' subjects; ii) that the qualifications and VET experience obtained were a link to postschool pathways and employment, providing a 'head start' for some and a 'back up' for others, and iii) that they offered a 'change of pace' from more intellectually demanding school subjects. The first and third views were problematic and contributing to negative perceptions of VET. Gore et al. (2017) also found that many Australian students lacked clear, accurate and current information about the VET sector. They suggested that schools and/or VET providers recruit a more diverse range of students and ensure that students and their parents/carers have a greater awareness of available VET pathways and destinations. Students' conceptions of those pathways and their destinations are a central factor. All of this emphasises the need for informed guidance at the local level to guide that decision-making, because the broader distal suggestions may be unhelpful.

For instance, Creed et al. (2010) compared the career development of workbound (i.e. moving directly into employment) and VET-bound students, relative to university-bound students in Australia. They found significant differences between the work-bound and university-bound students on career exploration, knowledge of the world of work, knowledge and use of decision-making principles, and career indecision. Significant differences were also found between work-bound and VETbound students' knowledge of the world of work. There were clear differences between these two groups of students' knowledge and decision-making procedures. Work-bound students were reported as being the least prepared, which may have resulted from a career education in their schools focussing on HE pathways at the expense of those focusing on work and VET. Thus, work-bound students may be making occupational decisions based on insufficient career information, a poor understanding of how labour markets operate, and with limited decision-making skills. That is, the default option has been assumed. The findings of their study suggest a need to make relevant career information and training available to those students contemplating an early end to their education so they can become better informed and more skilled in planning their occupational futures. Again here, the concern is for personalised, localised and impartial advice.

Not the least here is because as with some parents, Australian students were reported as often having outdated perceptions of the VET sector (Gore et al., 2017). They also reported students tending to form an early, but largely uninformed views that university is preferable to VET as a post-school destination, a conclusion also confirmed by Hargreaves and Osborne (2017). These findings suggest that providing positive views of VET is warranted earlier in their schooling than in mid/senior high school. Students were also sometimes confused and even unrealistic about the educational requirements for VET-related occupations (Hargreaves & Osborne, 2017; Gore et al., 2017). Hargreaves and Osborne (2017) concluded that students were motivated by both structured and ad hoc opportunities to experience

VET-related occupations, and that gender stereotypes continued to be a strong influence on career choice. Relatedly, in this volume, Billett et al. (2022a, b) suggest that overcoming apathy and a lack of interest on the part of students may only come with having to make informed decisions, even post-school. Yet in the meantime, schools can provide students with links to websites that show examples of VET training and related occupations, invite high-profile VET graduates or celebrities to talk to students about VET as an alternative to university, or provide more personalised career information about VET training and jobs. In this volume also, Aarkrog (2022) suggests that developing young people's ability for making rational and realistic decisions should be prioritised. Again, this outcome cannot be achieved without informed knowledge about VET and the occupations it serves.

As noted, and as evident in the discussion above, achieving changes in societal sentiment, the attitudes of young people, parents, those who teach in schools and familiars within the community will not arise from individual and isolated initiatives alone. Instead, what is required is a systematic approach to bring about this change. As foreshadowed, the factors above influencing young people's decision-making can be delineated into those that exist at national level and those that play out at a local level proximally in shaping their decision-making. In this way, and as foreshadowed, they comprise two distinct zones of influence, those that are more distal and those that are more proximal. In the section below, these two zones are elaborated and then followed by suggestions about the ways in which initiatives can be undertaken within these two zones of influence to inform young people more comprehensively and impartially about educational and work life pathways.

Zones of Influence: Distal and Proximal

Arising from the reviews advanced within this volume, and the contributions of country specific responses, it is possible to identify sets of factors that shape and can reshape the decision-making process about post-school pathways. As discussed above, these comprise the distal or more personally remote suggestions that are projected by societal institutions such as government, media, educational institution and industry. These are what Searle (1995) refers to as institutional factors – those from and of society. These comprise the basis of what is projected socially and culturally. Beyond these distal suggestions are those projected interpersonally and referred to as close or proximal factors, that reflect personal factors in the form of individuals' personal histories and what they know, can do and value as captured by their personal epistemologies (Billett 2009). Four key sources of advice, guidance and support for young people's decision-making about postschool pathways have been identified in the contributions to this volume. These comprise parents, teachers, peers and the community in which the young person directly engages. Commonly, these all comprise close or proximal forms of guidance, and shaped by their personal experiences and capacities. That is, these are largely exercised interpersonally (i.e., directly between the young person and the familiar). Importantly, it S. Billett et al.

is these proximal sources of information, guidance and support that are most likely to mediate unhelpful and constraining social suggestions such as those that might unfairly view VET pathways and the occupations to which they lead as being undesirable. So, these close sources of guidance are those that can variously amplify or moderate that societal suggestion. This distinction is well understood in the developmental literature on factors shaping human thinking and acting, with proximal engagements and guidance often given great prominence, generally because it is the close guidance in which activities and interactions with others come to shape the construction of knowledge through those experiences.

For the purposes of this chapter and as a means by which actions and strategies for enhancing the standing of VET can progress, these sets of distal and proximal factors are seen as two distinct but interrelated zones of influence, with the proximal shaping but also mediating the distal influences (see Fig. 2.1). The distal influences project societal sentiments through institutions and media and can include institutions of government, schools, vocational education and training institutions and industry including professional associations, unions that express the needs and demands of workplaces, as shown in Fig. 2.2, below. This figure offers a depiction of the distal influences on what constitutes worthwhile work, the standing of occupations, the provision of experiences to learn those occupations and engage in working life and how they are rewarded, which are then either amplified or moderated by proximal sources. So, within this figure are the proximal influences that directly engage with and shape young people's decision-making interpersonally about postal pathways. These include parents, teachers, peers and familiars and the communities in which young people engage. This also can include the kinds of media with which they interact on a personal basis. As noted, perhaps the way forward is for these

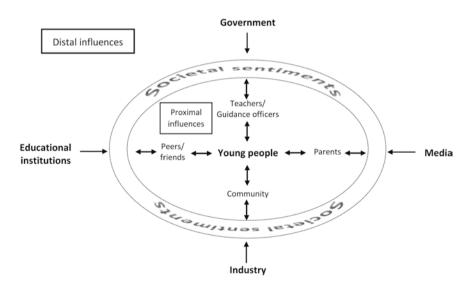


Fig. 2.2 Distal and proximal zones of influence and societal sentiments

interpersonal forms of guidance to variously amplify or moderate what is being suggested societally. While acknowledging that there is a role for both distal and proximal contributions to young people's decision-making, the most crucial in bringing about more informed and impartial processes will inevitably be at the proximal level. Hence, beyond attempting to change what is being projected societally, it would be at this level that initiatives to enhance the standing of VET will need to be focused.

It is often at the distal level that policies are made about how to progress nationally and regionally, the kinds and qualities of materials prepared and distributed, structures of educational pathways including tertiary education provisions organised, and what is taken as more or less prestigious forms of work captured through their requirements and accessibility and, sometimes, but not always, through level of remuneration. However, an elaboration of the sources and implications of these zones of influence need to be progressed in ways that identify practical strategies to ameliorate or respond to the task of providing informed and impartial advice.

Figure 2.2 depicts how actors within these local zones of influence come to shape young people's thinking and acting, in the form of decision-making. It indicates and emphasises the suggestions that are projected proximally by parents (e.g., aspirations, inferences, openness, various focuses including pragmatic outcomes, finding satisfying or fulfilling their interests), teachers (e.g., the projection of what is seen as being societally worthwhile occupations, what is valued in schools, what reflects their experience), friends (e.g., what constitutes contemporary and localised desirable occupations) and familiars/community that project options, preferences and what is deemed to be societally worthwhile or aligned with the young person's interests (Choy et al., 2022; Hodge et al., 2022) as is depicted in Fig. 2.3.

Yet, whilst studies consistently report how common and powerful these influences are, they also acknowledge that they are often partially or wholly uninformed,

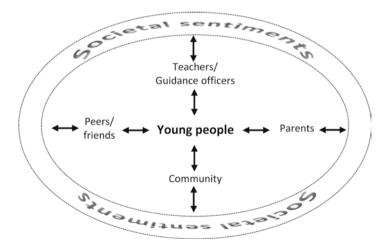


Fig. 2.3 Zone of proximal influence

or emphasise what influential others would prefer, rather than what the young persons desire. For instance, as indicated in Choy et al. (2022), teachers may lack understanding and underestimate significantly their shaping of students' decisionmaking, through the comments they make in day-to-day classroom discussions. Yet, from interviews with these teachers and other accounts (Fuller et al., 2014), it is evident that their views are based mainly on their own personal experience, which rarely extends to engagement in VET, those occupations served by it or even those who participate in it. As also reported in this volume, much the same seems to be the case for parents (Hodge et al., 2022). So, efforts to bring about change within young people's decision-making necessarily needs to include those influencing their decision-making at the local and interpersonal levels. These constitute their parents or caregivers, teachers at school, peers and friends, the community in which they engage. That is, efforts to bring about this change should not just focus on young people alone, but more broadly within the community and specifically directed at parents and teachers who comprise zones of influence that shape and project advice about post-school pathways.

Building upon what has been suggested above about the salience of the localised zones of influence shaping young people's decision-making about post-school pathways, and that beyond focusing on young people themselves there is also a need to inform the participants in these zones. These include parents, teachers, peers and other familiars. That is, these efforts should not be directed towards just young people themselves, but those who shape them.

Strategies and Approaches to Inform Decision-Making

Following from what has been proposed above, in the following sections are some suggestions about the ways in which societal institutions can attempt to enhance the standing of VET and the occupations it serves, through the provision of information, support and guidance, followed by the ways in which interpersonal interactions with parents and teachers can likewise assist young people make informed and impartial decisions about post-school pathways.

Institutional Support and Guidance

As depicted in Figs. 2.1 and 2.2, there are zones of influence on young people's decision-making about post-school pathways that might be described as distant or distal that inform and influence societal sentiments and perspectives that shape the available courses and access to them. These represent suggestions that are projected through institutions such as government, educational systems and media. These are rarely singular, often contradictory, and change over time. It is these that are engaged with by young people and variously accepted or rejected by them to various degree,

often mediated by inter-personal interactions. Here the concern is what actions can be undertaken to bring about change in how VET is perceived by those who engage closely or proximally with young people. The contributions to this volume suggest these distal influences are largely: government, education institutions, industry and electronic, broadcast and print media. Identified from the contributions made to this volume are the actions that can be played by each of these to influence young people's decision-making. Presented below are suggestions about how these institutions can come to influence distally any decision-making. These suggestions will have a greater or lesser applicability and impact across different nation states, regions and their institutional structures and existing situations and goals. Nevertheless, they stand as having distinct roles in influencing the societal and personal discourses through their zones of influence about post-school pathways.

Government

Government, at the national, state or regional levels, can encourage a more positive societal sentiment towards VET and the occupations it serves through:

- demonstrating and championing the significance of the range and kinds of occupations and their demands and requirements of skilful work developed through VET;
- emphasising the central role of these occupations in meeting national social and economic goals and the benefits to individuals;
- the creation of VET pathways that allow to continue in higher and further education and continuing training, and offer promising and worthwhile occupational careers in adulthood.
- resourcing VET in ways commensurate with the gravitas and extent of these goals;
- securing the direct involvement of industry, enterprises and professional associations in promoting occupations that are prepared for through VET; and
- advancing policies within schooling, such as performance indicators that are directed towards giving equivalent standing to VET as other post-school options.

Education Institutions

There are actions that can be taken by schools and, VET institutes to enhance the standing of VET and contribute to the provision of comprehensive and impartial advice about post-school pathways.

S. Billett et al.

Schools

In some countries, VET is embedded in compulsory school systems as a distinct pathway from the 'academic' stream, and in other countries it is seen as being primarily a post-school option. There are key roles schools can play here. These include providing impartial and informed advice about post-school pathways, and also promoting VET and the occupations it serves as being viable post-school options. Actions undertaken through schools might incorporate:

- promoting VET as a worthwhile and viable option from when students first enrol, on the assumption that parents/carers are likely to be most engaged at that point;
- continually promoting VET through newsletters, other school communications
 with parents, career nights, parent-teacher interviews, etc., i.e., on every occasion when there is a meaningful interaction with parents;
- ensuring that senior students have the opportunity to visit VET institutions and engage in some activities within them;
- ensuring that parents are aware of government provided information on VET, e.g., the school could share the link to any digital materials;
- consistently and genuinely celebrating VET students' achievements alongside other student achievements:
- publicly acknowledging the contributions that VET and VET teachers made to a school's curriculum;
- having performance indicators that reward schools' promoting and advancing VET as a viable post-school option;
- adopting policy that VET is regarded by the school as legitimate a choice for post-school pathways as university entry; and
- developing strategies to enhance teachers' and parents' knowledge of VET and parents' engagement with schools to promote VET as a worthwhile and viable post-school option.

VET Institutions

As has been reported across many contributions to this volume, VET institutions can play a role in providing options that are attractive to young people and institutions that they wish to enrol in and enjoy effective educational experiences. So, some of the specific actions that VET institutions can take to make the VET provision attractive to young people are:

- marketing themselves as widely and effectively as do universities, e.g., career evenings and hosting visits to these institutions in ways that engage students, parents and school teachers;
- having direct and effective communications between staff in the two kinds of institutions;

- promoting their strengths to overcome outmoded views of VET: contemporary courses and innovative teaching and pathways;
- engaging more effectively with potential students and their school advisers; and
- providing more flexible course options and an attractive social environment.

Industry

In many countries, the role of industry is perceived to be disengaged, yet where they are engaged, their influence can be powerful. Consequently, particularly in countries in which industry represents occupational sectors that are addressed through VET, there are key roles that industry representatives, employers, professional bodies, unions of employees can play in informing young people and their parents about the kinds of occupations that VET serves. Employers are often those that train people, are in close contact with students in the workplace, and can advise and guide these young people's decision-making. To achieve these outcomes, those representatives might:

- be more pro-active in being represented at schooling events and sponsoring VET scholarships, apprenticeships and internships;
- organise localised events where parents can share their stories of occupations and career passages with others, and at the same time learn from others about diverse occupations and pathways;
- identify how they can assist young people who are undecided about their postschool pathways and come to understand the requirements for VET; and
- promote and champion the changing face of VET and related occupations and support key teachers and career advisers to attend VET events, to be better informed and enthusiastic about VET.

Media

The print, electronic and broadcast media reach and engage people across ages and across the community. It would be helpful if these media could support vision-making through informed and impartial information, which includes challenging assumptions within society about VET and the occupations it serves. Whilst the media should be independent, it can assist by providing informed and impartial advice and in ways that represent VET and the occupations it serves in authentic ways. This could include:

- recognising the importance of the occupations that are prepared through VET;
- informing about the kinds of work tasks and requirements of those occupations;
- assisting by providing authentic images, accounts and narratives about VET;

 emphasising the important contributions and application VET makes to working people's lives and the public and private sector enterprises that generate nations' goods and services.

What has been proposed here is that these institutions comprising the distal zone of influence shape societal, regional or local sentiments about VET and the occupations it serves. Those influences can variously and sometime contradictorily shape individual and collective contributions to the comprehensiveness and impartiality of advice about occupations and VET. For instance, government efforts to make VET a viable option for post-school pathways and taking action to make these provisions and institutions attractive to young people, are countered by elsewhere promoting greater percentages of university graduates are required. These institutional influences are also found in the kinds and extent of resourcing of VET and approaches taken to secure the kinds of educational outcomes required to perform occupational tasks and develop a strong sense of self through their occupations.

Proximal Support and Guidance

Much of the sources of close influence about young people's decision-making about post-school pathways arises, interpersonally, through interactions and direct engagement individuals have when making decisions. These interactions are often with their parents or guardians, teachers, peers and other community members. Importantly, these familiars are influential and can either amplify and reinforce the negative societal sentiment about VET and the occupations it serves or, conversely, work against that and embrace these as being worthwhile post-school pathways. In these ways, they importantly mediate the various influences on young people's decision-making. Hence, they play a key role and are an important focus for any initiatives to secure a more comprehensive and impartial process of informing young people about post-school pathways. As indicated in Fig. 2.2, these familiars are usually found to be: (i) parents or guardians, (ii) teachers, (iii) peers and (iv) community members.

Parents or Guardians

In nearly all accounts of decision-making associated with post-school pathways, either reported through its contributions or through reviews, parents are key and primary source of advice and influence on young people's decision-making. This is not to say that advice is always followed, but these familiars are influential, nevertheless. However, parents and guardians are by different measures informed about, engaged in and influential in the process of decision-making. Consequently, there are specific roles that they can undertake to assist making this process as

comprehensively informed and impartial as possible. However, it is acknowledged that parents, like teachers, may struggle with impartiality because they are directed towards promoting and securing the young people's aspirations. They can assist by:

- being proactive in seeking advice from informed contacts (e.g., career guidance officers, teachers) to learn about different post-school pathways and develop understandings of different career options;
- engaging in dialogic interactions with their children and experiences to elaborate and advance to occupations they are better suited for;
- enacting processes to assist young people in a more informed and impartial deliberation about preferred occupations and post-school pathways;
- encouraging their children to engage in casual employment during schooling to develop a stronger sense of career interests; and
- participating in processes organised by schools and other sources to assist their children make decisions about post-school pathways that are suited to their capacities, needs and ambitions.

Teachers

The evidence suggests that teachers are influential in the decisions that young people make about post-school pathways and perhaps, more so than they realise. Given that, there are some activities that they can undertake to assist in the process of young people making informed and impartial decisions about those pathways, including being open to consider VET and the occupations it serves. For instance, they could:

- become more informed and knowledgeable about the range of post-school pathways and associated career options
- be conscious that by referring to their own experiences and preferences they may be precluding some, and privileging other pathways
- be careful about and monitor comments they make which may be unfounded and have unhelpful connotations about vocational education the occupations it serves
- initiate and engage students in regular conversations about their career interests and preferences
- engage parents in the discussions of career guidance for their children
- participate in activities, such as those provided for students, to visit VET institutions and be informed about a range of occupations, career information, and otherwise be more open and aware of pathways that their students might take.

It is acknowledged that this is but one of the many roles in which teachers need to participate, but they would understand the power and importance of the hidden curriculum, and it seems, in the issue of decision-making about post-school pathways, that teachers are quite prominent here.

Conclusions

Evident across the literature and in contributions to this volume is that concerted action is required to enhance the standing of VET and the occupations it serves. This action is required to occur at the societal level through the actions of government, education system and industry, including those who employ, through societal sanctioning and legitimising. Moreover, that action needs to be directed to not just young people, but those familiars (i.e., parents, teachers, peers) who intentionally or unintentionally shape their decision-making about post-school pathways interpersonally. What is suggested here is that there is a need to reset and recast societal sentiment about VET and the occupations it serves, through the action and suggestions of key institutions and familiars. It is also proposed that by informing and having initiatives at the local level that seeks to engage and inform those familiars, change at the local level can incrementally reshape societal views about VET and the occupations it serves. That resetting will help establish a societal milieu in which it will be easier and more productive to advance impartial advice about post-school pathways, including VET. Undoubtedly, it would be beyond the scope of such efforts to achieve parity between VET and university, but it is important that the distinctions between what these key pathways have to offer young people are presented in a comprehensive and impartial way. This requires suggestions projected distantly by key societal institutions and also more proximally by the engagement of familiars, principally parents, teachers and peers.

References

- Aarkrog, V. (2020). The standing and status of vocational education and training in Denmark. *Journal of Vocational Education and Training*, 72(2), 170–188.
- Aarkrog, V. (2022). Chapter 13: The significance of learning environment and decision-making for enrolment in and completion of VET: A Danish case. In S. Billett, B. E. Stalder, A. Vibe, S. Choy, S. Hodge, & A. H. Le (Eds.), The standing of vocational education and the occupations it serves: Current concerns and strategies for enhancing that standing. Springer Nature.
- Bedson, L., & Perkins, D. (2006). A positive influence: equipping parents to support young people's career transitions. Brotherhood of St Laurence.
- Billett, S. (2009). Personal epistemologies, work and learning. *Educational Research Review*, 4(3), 210–219.
- Billett, S. (2011). Vocational education: Purposes, traditions and prospects. Springer.
- Billett, S. (2014). The standing of vocational education: Sources of its societal esteem and implications for its enactment. *Journal of Vocational Education and Training*, 66(1), 1–21.
- Billett, S. (2020). Perspectives on enhancing the status of vocational education and the occupations it serves. *Journal of Vocational Education and Training*, 72(2), 161–169.
- Billett, S., & Le, A. H. (2022). Chapter 4: Improving the standing of VET: Perspectives from countries with developing economies. In S. Billett, B. E. Stalder, A. Vibe, S. Choy, S. Hodge, & A. H. Le (Eds.), *The standing of vocational education and the occupations it serves: Current concerns and strategies for enhancing that standing*. Springer Nature.
- Billett, S., Choy, S., & Hodge, S. (2020). Enhancing the standing of vocational education and the occupations it serves: Australia. *Journal of Vocational Education and Training*, 72(2), 270–296.

- Billett, S., Dymock, D., Choy, S., Hodge, S., & Le, A. H. (2022a). Chapter 18: Practical strategies and distributed responsibilities: Enhancing the standing of vocational education and the occupation it serves. In S. Billett, B. E. Stalder, A. Vibe, S. Choy, S. Hodge, & A. H. Le (Eds.), *The standing of vocational education and the occupations it serves: Current concerns and strategies for enhancing that standing*. Dordrecht, The Netherlands.
- Billett, S., Dymock, D., Hodge, S., Choy, S., & Le, A. H. (2022b). Chapter 6: Shaping young people's decision-making about post-school pathways: Institutional and personal factors. In S. Billett, B. E. Stalder, A. Vibe, S. Choy, S. Hodge, & A. H. Le (Eds.), The standing of vocational education and the occupations it serves: Current concerns and strategies for enhancing that standing. Springer Nature.
- Bisson, R., & Stubley, W. (2017). After the ATAR: Understanding how Gen Z transition into further education and employment. Year13. Retrieved from https://youthsense.com.au/research
- Cedefop. (2017). European public opinion survey on vocational education and training. Publications Office of the European Union. Cedefop Research Paper No 62. https://doi.org/10.2801/264585
- Cho, M. K., & Apple, M. (1998). Schooling, work and subjectivity. British Journal of Sociology of Education, 19(3), 269–291.
- Choy, S., Le, A. H., Hodge, S., & Billett, S. (2022). Chapter 17: Surveys of students, parents and teachers. In S. Billett, B. E. Stalder, A. Vibe, S. Choy, S. Hodge, & A. H. Le (Eds.), The standing of vocational education and the occupations it serves: Current concerns and strategies for enhancing that standing. Springer Nature.
- Clement, U. (2014). Improving the image of technical and vocational education and training. Federal Ministry for Economic Co-operation and Development. Retrieved from https://www.dcdualvet.org/wp-content/uploads/2014_GIZ_Improving-the-Image-of-Technical-and-Vocational-Education-and-Training_A-synthesis.pdf
- Crawford, M. B. (2000). Shop class as soulcraft. Penguin Press.
- Creed, P. A., Patton, W., & Hood, M. (2010). Career development and personal functioning differences between work-bound and non-work bound students. *Journal of Vocational Behavior*, 76(1), 37–41.
- Dalley-Trim, L., Alloway, N., & Walker, K. (2008). Secondary school students' perceptions of, and the factors influencing their decision-making in relation to, VET in schools. *The Australian Educational Researcher*, 35(2), 55–69.
- Deissinger, T. (2022). Chapter 5: The standing of dual apprenticeships in Germany: Institutional stability and current challenges. In S. Billett, B. E. Stalder, A. Vibe, S. Choy, S. Hodge, & A. H. Le (Eds.), *The standing of vocational education and the occupations it serves: Current concerns and strategies for enhancing that standing*. Springer Nature.
- Fuller, C., McCrum, E., & Macfadyen, T. (2014). Teachers' knowledge and experiences of information advice and guidance: Some implications for the current policy context in England. Education Inquiry, 5(22), 265.
- Galliott, N. (2017). Online career guidance: Does knowledge equate to power for high school students? *Journal of Psychologists and Counsellors in Schools*, 27(2), 190–207.
- Gaylor, L., & Nicol, J. J. (2016). Experiential high school career education, self-efficacy, and motivation. *Canadian Journal of Education*, 39(2), 1–24.
- Gore, J., Holmes, K., Smith, M., Lyell, A., Ellis, H., & Fray, L. (2015). Choosing university: The impact of schools and schooling (Final report to the National Centre for Student Equity in Higher Education). University of Newcastle.
- Gore, J., Ellis, H., Fray, L., Smith, M., Lloyd, A., Berrigan, C., Lyell, A., Weaver, N., & Holmes, K. (2017). Choosing VET: Investigating the VET aspirations of school students. NCVER.
- Hargreaves, J., & Osborne, K. (2017). Choosing VET: aspirations, intention and choice. NCVER. Haybi-Barak, M., & Shoshana, A. (2020). Separatist biopolitics: The dual discourse of the vocational education policy in Israel. *Journal of Vocational Education and Training*, 72(2), 297–314.
- Hiim, H. (2020). The quality and standing of school-based Norwegian VET. *Journal of Vocational Education and Training*, 72(2), 228–249.

- Hiim, H. (2022). Chapter 10: The quality and status of school-based Norwegian VET. In S. Billett,
 B. E. Stalder, A. Vibe, S. Choy, S. Hodge, & A. H. Le (Eds.), The standing of vocational education and the occupations it serves: Current concerns and strategies for enhancing that standing. Springer Nature.
- Hodge, S., Billett, S., & Choy, S. (2022). Chapter 16: Influences on post-school decision-making: Perspectives of school students, parents, teachers (Phase 1). In S. Billett, B. E. Stalder, A. Vibe, S. Choy, S. Hodge, & A. H. Le (Eds.), The standing of vocational education and the occupations it serves: Current concerns and strategies for enhancing that standing. Springer Nature.
- James Relly, S. (2022). Chapter 3: Understanding the purpose and standing of technical and vocational education and training. In S. Billett, B. E. Stalder, A. Vibe, S. Choy, S. Hodge, & A. H. Le (Eds.), *The standing of vocational education and the occupations it serves: Current concerns and strategies for enhancing that standing*. Springer Nature.
- Krause, K. L., Vick, M., Boon, H., Bland, D. C., & Clark, J. A. (2009). A fair go beyond the school gate? Systemic factors affecting participation and attainment in tertiary education by Queensland students from LSES backgrounds. Queensland Department of Education and Training.
- Lamb, S., Maire, Q., Walstab, A., Newman, G., Doecke, E., & Davies, M. (2018). *Improving Participation and Success in VET for Disadvantaged Learners* (Research Report). National Centre for Vocational Education Research (NCVER).
- Lasonen, J., & Manning, S. (2000). How to improve the standing of vocational compared to general education. A collaborative investigation of strategies and qualifications across Europe. Training in Europe. Second Report on vocational training research in Europe.
- Martínez-Morales, I., & Marhuenda-Fluixá, F. (2020). Vocational Education and Training in Spain: Steady improvement and increasing value. *Journal of Vocational Education and Training*, 72(2), 209–227.
- McIlveen, P., Morgan, T., & Bimrose, J. (2012). A longitudinal study of the experience of a career development program for rural school students. *Australian Journal of Career Development*, 21(1), 22–30.
- Nägele, C., & Stalder, B. E. (2018). Trends in vocational education and training research.

 Proceedings of the European Conference on Educational Research (ECER), Vocational

 Education and Training Network (VETNET). Paper presented at the Proceedings of the

 European Conference on Educational Research (ECER, Bolzano).
- Pantea, M. C. (2022). Chapter 14: Elevating the standing of vocational education and training in Romania. In S. Billett, B. E. Stalder, A. Vibe, S. Choy, S. Hodge, & A. H. Le (Eds.), The standing of vocational education and the occupations it serves: Current concerns and strategies for enhancing that standing. Springer Nature.
- Parliament of Victoria Economic, Education, Jobs and Skills Committee. (2018). *Inquiry into career advice activities in Victorian schools*. Retrieved from https://www.parliament.vic.gov.au/images/stories/committees/eejsc/Career_Advice_Activities/EEJSC_58-04_Text_WEB.pdf
- Phillips, M. (2012). Why should we care about vocational education? *Edutopia*. Retrieved from: www.edutopia.org/blog/vocational-education-benefits-mark-phillips
- Rainey, L., Rainey, L. M., Simons, M., Pudney, V., Pudney, V. A., & Hughes, E. (2008). What choice? An evaluation of career development services for young people. NCVER.
- Rintala, H., & Nokelainen, P. (2020). Standing and attractiveness of vocational education and training in Finland: Focus on learning environments. *Journal of Vocational Education and Training*, 72(2), 250–269.
- Rintala, H., & Nokelainen, P. (2022). Chapter 8: Promoting the standing of VET in Finland: Balancing amongst the different aims of VET. In S. Billett, B. E. Stalder, A. Vibe, S. Choy, S. Hodge, & A. H. Le (Eds.), *The standing of vocational education and the occupations it serves: Current concerns and strategies for enhancing that standing*. Springer Nature.
- Rose, M. (2004). The mind at work: Valuing the intelligence of the American worker. Viking Press. Rothman, S., & Hillman, K. (2008). Career advice in Australian secondary schools: Use and usefulness (LSAY research reports, No. 53). ACER.

- Sennett, R. (2008). The craftsman. Yale University Press.
- Stalder, B. E., & Lüthi, F. (2020). Job resources and career success of IVET graduates in Switzerland: A different approach to exploring the standing of VET. *Journal of Vocational Education and Training*, 72(2), 189–208.
- Stalder, B. E., & Lüthi, F. (2022). Chapter 12: Enhancing the standing of VET in Switzerland. In S. Billett, B. E. Stalder, A. Vibe, S. Choy, S. Hodge, & A. H. Le (Eds.), The standing of vocational education and the occupations it serves: Current concerns and strategies for enhancing that standing. Springer Nature.
- UNESCO-UNEVOC. (2018a). Improving the image of TVET: Making TVET attractive to youth. Retrieved from Bonn, Germany.
- UNESCO-UNEVOC. (2018b). Short summary of the Virtual Conference on improving the image of TVET: Making TVET attractive to youth. Retrieved from Bonn, Germany: https://vocation-sandlearning.files.wordpress.com/2019/10/vc_synthesis_21_final.pdf
- Universities Australia. (2008). A National Internship Scheme: Enhancing the skills and work-readiness of Australian university graduates (Universities Australia position paper no. 3/08). Universities Australia.
- Veillard, L. (2015). University-corporate partnerships for designing workplace curriculum: Alternance training course in tertiary education. In L. Filliettaz & S. Billett (Eds.), Francophone perspectives of learning through work: Conceptions, traditions and practices. Springer.
- Veillard, L. (2022). Chapter 7: Alternance training as a way to improve attractivity of vocational education program in France. In S. Billett, B. E. Stalder, A. Vibe, S. Choy, S. Hodge, & A. H. Le (Eds.), *The standing of vocational education and the occupations it serves: Current concerns and strategies for enhancing that standing*. Springer Nature.
- Webb, S., Black, R., Morton, R., Plowright, S., & Roy, R. (2015). Geographical and place dimensions of post-school participation in education and work. NCVER.
- Wolf, A. (2011). *Review of vocational education: The Wolf report*. Department of Education. Retrieved from www.education.gov.uk/publications/eOrderingDownload/The%20Wolf%20 Report.pdf
- Wolf, A., Dominguez-Reig, G., & Sellen, P. (2016). Remaking tertiary education: Can we create a system that is fair and fit for purpose? Education Policy Institute. Retrieved from: http://epi.org.uk/report/remaking-tertiary-education-can-we-create-a-system-that-is-fair-and-fit-for-purpose/#

Part II Issues, Sources and Consequences of the Standing and Status of Vocational Education

Chapter 3 Understanding the Purpose and Standing of Technical and Vocational Education and Training



Susan James Relly

Abstract Improving the standing of vocational education and training (VET) has confounded governments globally for decades. Yet, a skilled workforce is the backbone of any society and economy. The pandemic of 2020 and 2021 has highlighted the importance of robust skills formation systems at all levels as workers have deployed knowledge and skills rapidly to deal with the medical, social, and economic situation working towards recovery. In so far as there are two post-school routes into skilled employment – the vocational and the academic – the first predominantly has a specific occupational focus, for example a hairdresser, carpenter or technician; the second leads to employment after gaining an undergraduate (sometimes Masters) degree leading mostly to a professional occupation such as lawyer, consultant or physiotherapist. While both routes lead to the labour market, employment is really only the stated purpose of the first route; it is not the explicit raisons d'etre of higher education. To that end the vocational and academic routes that make up education systems have different purposes, for different stakeholders, with different outcomes; they can be complementary routes but are not analogous. Yet, the standing of the vocational route, more often than not, in most countries of the world, is compared to the academic route. Calls for equivalence belie the fundamental intention and importance of each and while these calls have persisted, parity between the two routes has not been achieved. Indeed, this chapter argues that parity of the two routes is unachievable. The purpose and the nature of VET means that the standing of technical vocational education and training needs to be promoted in its own right. This promotion will stem from a better understanding of its purpose.

 $\label{eq:constraint} \textbf{Keywords} \ \ VET \cdot Vocational \ education \ and \ training \cdot Vocational \ route \cdot Esteem \cdot \\ Skills \ economy \cdot Parity \cdot E\&T \ policy \cdot Vocational \ assessment \cdot Vocational \ learning \cdot \\ HE \ expansion$

S. J. Relly (⊠)

SKOPE, Department of Education, University of Oxford, Oxford, UK e-mail: susan.jamesrelly@education.ox.ac.uk

Introduction

Supply-side education and training (E&T) policy, has for a long time, focussed on higher education (HE); higher education institutions (HEIs) have been seen as the main vehicle to skilled employment (Davies & Ercolani, 2021). Moreover, in recent decades, especially since the massification of higher education (HE) a policy focus has been on the knowledge economy (Brown et al., 2008). Government policies have been strongly influenced by the idea that HE leads to better jobs, greater social cohesion, and improves students' knowledge and skills levels, which then improve productivity and economic performance (Keep, 2020). While HEIs are clearly playing an important role in terms of the knowledge economy, generating intellectual property, we miss understanding and recognising the skills underpinning the knowledge developed. A case in point is the vaccine development for the current Covid-19 pandemic.

Many great minds have been involved in the long-term development of vaccine protocols that have led to the current supply of vaccines, such as Oxford Astra Zeneca, that are resulting in decreased death, illness, and hospitalisations. The vaccines development has been underpinned by finely-honed, high quality skills from many technicians helping to develop, test, produce, and deliver it globally. In a symbiotic way knowledge and skills have come together to provide an answer to a global health and economic crisis. Many of these skills are taught and developed through the technical and vocational education and training (VET) route and are clearly imperative for economic productivity and growth (OECD, 2017).

The narrative focussing on the knowledge economy undermines that of the skills economy. The skills economy focusses on understanding and recognising the high-quality skills developed through VET with jobs created that are valued by all members of society (James Relly et al., 2021). Excellence in VET has existed in skills systems around the world for many decades; economic prosperity has depended on it. Yet, the VET route experiences more policy churn, less attention, less funding, attracts disproportionately high numbers of low-income students who may be excluded from general/academic education and often come from areas of multiple disadvantage (Cabinet Office, 2011; Crawford et al., 2011; Lewis, 1994; Pring et al., 2009). It is also victim to a narrative that is embedded in a deficit framing model (Wolf, 2011) perpetuating the vocational/academic divide.

In Western Europe and Nordic countries, where there are distinct E&T pathways with regulated labour markets and licence to practice requirements, there is recognition that the existing routes – the vocational and the academic – that make up the education system in these countries have different purposes, for different stakeholders, with different outcomes; they can be complementary routes but are not analogous. Indeed, it has been suggested that the vocational route is less well-regarded in liberal market economies (e.g. the UK, the USA) than in coordinated market economies (e.g., Denmark or Germany); the former view VET as a track for those with lower academic performance while the latter see VET as a contributor to an innovation-based economy (Bosch & Charest, 2008). Because the vocational route

has standing in these countries achieving parity is much less of an issue (OECD/ILO, 2017) unlike in countries such as Australia, Canada, Great Britain, and the US where VET is stigmatised (Virolainen & Stenström, 2014).

Although the intellectual and professional nature of much VET is increasingly recognised due to the number of medium- and high-skilled jobs that are now considered vocational (Clifton et al., 2014), and the recent Skills for Jobs White Paper (DfE, 2021) for England underlined policymakers' recognition that skills development must be at the forefront of E&T policy and economic strategy, the general perception of VET in Great Britain, and many countries elsewhere, predominantly identifies it with low-skilled manual work with little or no progression opportunities (Rutter, 2013). The relative standing of VET may stem from the historically lower levels of esteem for manual workers when compared to those who could afford to engage with theoretical ideas and knowledge (Hyland & Winch, 2007; Silver & Brennan, 1988). Moreover, the historical class divide which finds its continuation in today's education system in England, the nature of vocational learning and qualification development, the impact of mass HE expansion, a hierarchical labour market structure, and methods of assessment in VET all impact the standing of VET. The following builds upon these drawing predominantly from the English context, although elements of many of these factors are applicable to VET systems globally. Understanding these is important if a policy solution is to be developed that aids the standing of VET.

Historical Class Divide

The way the class system in England operates (Elliott Major & Machin, 2018), and its influence through qualifications systems across the world (Allais, 2017), compounds the way in which middle-class and upper-class parents perceive of their children attending the academic route rather than participating in the vocational route (Wolf, 2002). For over 50% of young people, it is clear that the strong preference is to pursue school (A levels) or college-based courses (primarily A levels and, to a lesser extent, BTECs) as opposed to employment-based qualification routes (NVQs and apprenticeships) (DfE, 2019a).

Fisher and Simmons (2012, p. 38) have suggested that the unequal standing, 'between the vocational and the academic [...] has never been effectively addressed [...] because it is so deeply seated in institutional divisions and peculiarly English cultural attitudes.' The fundamental issue remains: when one route has no esteem in the eyes of parents and students choice of the vocational route becomes not a choice at all. We can see this reflected in the take-up of vocational qualifications, especially in terms of peer effect (Battiston et al., 2020). In so far as BTEC qualifications have been successful, policy turmoil through various training reports and initiatives from the 1950s to early 1990s muddied understanding surrounding vocational qualifications. Instead of enhancing the standing of vocational training schemes and qualifications, the opposite effect was felt; these 'schemes became associated with cheap

labour, social engineering and the massaging of unemployment statistics' (Ryan & Unwin, 2001, p. 99). Ainley (1990) pointed out that the plethora of unrelated VET initiatives failed to add up to an overall national strategy or system of vocational education and assessment, and for lacking an effective interface with formal schooling and higher education; many of these initiatives were stigmatized as 'schemes for the less able, the less motivated and above all else the less employable, and thereby being sucked into the vicious circle of low status' (Raffe, 1990, p. 63).

Noting this policy cycle is important because the politicians and the policymakers that are setting the education agenda (Taysum, 2020) are potentially replicating advantage and disadvantage through the education choices that are being made by them and their consultants (Gunter et al., 2015). If one is making decisions about the type of education system that should be available to all students, then it is likely the default will be to their own experiences; a not dissimilar situation to recruitment and selection decisions in elite professional service firms. Ashley and Empson (2017) found law firms recruited graduates in their mirror image even where a commitment to social inclusion exists. Audickus et al. (2019, p. 17) show that the number of,

MPs who were former manual workers decreased from around 16% of all MPs in 1979 to 3% in 2015. The proportion of MPs with a background in one of the 'traditional' professions has also fallen, from 45% in 1979 to 31% in 2015. Within this category the proportion of former schoolteachers and former barristers has declined while the proportion of former solicitors has risen. The numbers of teachers from schools and teachers from universities and colleges were rising until 1997. In the period from 2001 to 2015 it fell below the 1979 level. As the established professions have declined, they have been replaced by MPs from other non-manual occupations. Particularly notable is the growth in the number of new MPs with previous political experience. In 1979 3% of MPs from the main parties were previously politicians/political organisers, compared to 17% in 2015.

With the decisions about VET being made by politicians, policymakers and civil servants that have little or no experience of the vocational route – it is after all for other people's children (Wolf, 2002) – it is not surprising that the policy discourse is degrading to the vocational route, and that parents and students do not see it as a viable option with standing (see Billett et al., 2022 on young people's decision-making on post-school pathways).

The Nature of Vocational Learning and Qualification Development

A social stigma attached to vocational qualifications cannot be overcome by merely introducing a new type of vocational qualification or claiming parity even though government interventions have attempted, and mostly failed, in trying to make the vocational route more attractive. In England, some of these new vocational qualifications had the direct purpose of raising the standing between academic and vocational qualifications, such as General National Vocational Qualifications (GNVQs). These were to be school- and college-based qualifications studied alongside

academic qualifications with some work experience and assessed through projects and assignments, yet these qualifications were,

...intended to inform both employers and university admission tutors that its holder had reached, through a different and more applied learning experience, the same 'level' of educational performance as an applicant with traditional A-level passes. But in a system in which 'practical' studies have been regarded for so long as suitable only for the second best, it was not surprising that most of those qualified to take the academic route did so, or that many less obviously 'suitable' students did so too. In so far as the two qualifications competed for the same students, they did so on very unequal terms (Edwards, 2008, p. 371)

Rather than bridging the academic-vocational divide reforms led to an "academic drift' within VET where, in order to achieve 'equal standing', qualifications become more like those with which they seek parity' (Raffe & Spours, 2007, pp. 42–43) (this will be discussed further below in relation to assessment). Trying to improve VET by making it more like academic qualifications, enforces the underlying assumption that an academic education is superior. The implication is that the academic approach is highly systematic whereas the vocational approach is far less structured, focusing, *in extremis*, on just those areas needed to perform practical tasks does not help. These are, to a greater or lesser extent, caricatures because engineering, medicine and nursing, for example, are all in higher education with a mix of practice in real world settings (Billett, 2009) and while more characteristic of the vocational approach, are afforded a higher esteem because of the institutions in which the qualification is earned (Keep, 2018a).

The challenge is exacerbated by the fact that many vocational qualifications contain so little theoretical knowledge in England, particularly those below Level 3 (Winch, 2011), which is meant to be equivalent to A-Levels. As a consequence, the two routes are more polarised than in some other European countries, for example, Germany and the Netherlands. The underlying issue is that a very narrow concept of skills formation based on the ability to complete specific tasks, rather than occupational capacity, has been maintained emphasising outcomes rather than on understanding that is based on knowledge and broader skill development.

Vocational qualifications are accorded a general equivalency to academic qualifications: for example, in England an intermediate apprenticeship (Level 2) is given declarative equivalency to 5 GCSEs at grades A*-C and an Advanced Apprenticeship (Level 3) equates to two A levels in the regulated Qualifications Framework (RQF). While no doubt intended to make these routes more attractive, in reality this does not stand up to scrutiny. For example, the workplace element of T-Levels was reduced before they were even implemented into the qualification system to make it more equitable to academic qualifications. The above criticisms do not necessarily extend to all vocational qualifications though. BTECs, for example, were the second most important qualification for entry to universities, and have been shown to be a good stepping-stone for entry into higher education (Patrignani et al., 2017). Even so, Shields and Masardo (2018, p. 14) make the important point that, 'although vocational qualifications such as BTEC allow entry to higher education ... findings show that nominal equality in terms of progression pathways is quite different from actual equality in outcomes'.

Mass Expansion of Higher Education (HE)

Where once HE was the preserve of a chosen few, globally HE has expanded, in some countries more than others. The Labour government of the 1990s, 'set a target of 50 per cent of young adults going into higher education in the next century'. Not only did HE expand, it became a goal for many who would have chosen the vocational route. The result was HEI's offering a widely dispersed range of subjects and degrees, many of which are vocational from Level 3 upwards to Level 6 - the equivalent of a bachelor's degree or higher. In some institutions we can see excellent examples of where HEI's are more in tune with local labour markets' needs, combining the vocational and the academic. For example, Middlesex University, which was previously a Polytechnic (pre-1992), has developed degrees in partnership with local employers, sharing in the development of the degrees and in the teaching on them, and with practical work in the firm included (with close relation to the theory back in the university site). Another example of achieving, '... greater parity of esteem between vocational and academic credentials, and to achieve greater global competitiveness, new 'elite' centres for vocational education, known as University Technical Colleges, were announced' (Atkins & Flint, 2015, p. 36) in 2010 with a University as the main sponsor often in conjunction with a major employer and/or FE college. The UTC in Derby has partnered with Rolls Royce as the employer partner. There are currently 49 UTCs operating in England.

An issue remains though and that is even though these institutions all have university status, within them they are ranked, and institutional status still matters (Keep, 2018a), which impacts on the types of subjects, courses and degree levels offered, and labour market outcomes (discussed below). Williams and Filippakou (2010) hypothesised that mass higher education is more like a series of concentric circles in which elite institutions remain at the centre, with the increasingly wide band of universities and colleges offering HE, whether considered academic or vocational, moving outward.

This massification, in essence, is exacerbating the problem. As Keep (inter alia) has pointed out, we do not need more graduates but more people qualified at intermediate (sub-degree) levels 4 and 5. The focus on graduates in England has meant a hollowing of the workforce trained at these levels that are not seen in other OECD countries, or even in Scotland where 'sub-degree courses have remained a much larger component of post-compulsory activity', and which prior to the recession in the 1980s England had a lot of: 'Alongside apprenticeships, large employers such as the BBC, the National Coal Board, British Steel, BP, ICI, PO telecoms, British Rail and the electricity boards all offered HND/HNC technician training via day or block release or night school' (Keep, 2018b). While some predicted a hollowing out of these occupations due to technological advancement and emphasis on a knowledge economy, the need for immediate level jobs has not abated.

Labour Market Structure

Within this complex arena of qualifications, the worth of vocational qualifications is ultimately dependent on employers buying in to their currency in labour markets. At present, many occupations in many countries lack stringent license to practice legislation, outside of the professions where in many cases their higher education degree is seen as such. Where such occupational license is required it is often underpinned by health and safety legislation, such as for electricians and gas fitters in the UK. Lack of professional licenses to practice has long been criticised as it fundamentally undermines vocational qualifications and provides little incentive for employers to support VET schemes (e.g., Mazenod, 2016). In turn, this perpetuates the reputational divide created between academic and vocational qualifications impacting their standing.

So, with more and more young people encouraged to enter HE, whether it is the right path for them at that point in time or not (as opposed to encouragement to enter a high-quality apprenticeship or higher vocational/technical qualification) the labour market becomes flooded with graduates. The cascade down the occupational hierarchy that occurs when graduates enter non-graduates' jobs is problematic (Tholen et al., 2016). With a larger number of graduates looking for employment in a labour market with a finite number of traditionally graduate jobs, those young people looking to move into jobs that were traditionally accessed through the vocational route become overlooked. From an employer's perspective this is a rational move. When faced with the option to recruit and select a graduate versus a nongraduate, the perceived capability that HE signifies is vast (Keep & James, 2010). What this does is create a system of unequal opportunities particularly where good quality vocational options are subsumed into HE, making all else residual and seen to be of lesser value, and for students where it is assumed they cannot or do not have the ability to attend HE.

Holmes and Mayhew (2016) have shown how over-qualification and skills mismatch in the UK graduate labour market as a result of the occupational hierarchy cascading downward leads individuals with vocational qualifications to achieve worse outcomes on a number of levels. Furthermore, those learners who enter HE through a vocational pathway achieve lower grades, even when controlling for a number of socio-economic factors (Shields & Masardo, 2018). While there are positive associations between the achievement of vocational qualifications at Levels 3 and 4 and labour market outcomes (Patrignani et al., 2017), and pockets in which people with higher level vocational/technical qualifications in STEM subjects have rates of return significantly above those of many degree holders (Espinoza & Speckesser, 2019), the currency and standing of a vocational qualification is generally seen as lesser than academic qualifications.

56 S. J. Relly

Assessment in VET

Whenever a new government comes into power in England, the VET system is often in the crossfire with calls for reforming the skills system through relevant, high quality vocational qualifications with an assessment system to match. This practice is usually underlined by politicians' fervent message of how the vocational route is imperative to improving economic prosperity and the life of millions of people (DfE, 2011; DfE/DBIS, 2013; DBIS/DfE, 2016); a form of tacit social mobility. This has resulted in the vocational system and its qualifications embroiled in turmoil over the last five decades (Sykes, 2009, p. 27), often with each reform meaning that the qualification morphs into an academic qualification in terms of content and assessment.

Keep (2018a) has noticed the constant change to the vocational assessment in England, primarily in the name of skills development and with the political aim of achieving some standing between the academic and vocational routes (Fisher & Simmons, 2012). Irrespective of whether vocational standing has been framed primarily as an economic or social concern, the policy discourse about improving the quality and value of vocational education has a strong social justice dimension, as it was to bring those at the margins of society back into the fold (Avis, 2009).

The supposed goals and benefits of VET reforms in England included ensuring high standards for all qualifications - which would then be equally worthwhile and equally valued - and that lifelong learning and the teaching of key skills would provide better opportunities for vocational learners while making them more qualified for the labour market (Hodgson & Spours, 2008). One avenue by which increased standing of VET was to be achieved was through the publication of standards-based linkages; that is, official tables of equivalence between different types of vocational and academic education (Shields & Masardo, 2018). Yet, such tables would hardly suffice to improve the standing of vocational education, if further educational and labour market outcomes continued to be unequal (Pring et al., 2009).

The most recent VET initiative is the introduction of T-levels (technical levels), mentioned in a previous section. They are made up of three compulsory elements and are purportedly equivalent to three A-levels:

- a technical qualification, which will include
 - core theory, concepts and skills for an industry area
 - specialist skills and knowledge for an occupation or career
- an industry placement with an employer of at least 315 h (approx. 45 days)
- a minimum standard in maths and English if students have not already achieved them

T-levels can be offered in both schools and FE colleges, although the vast bulk of the providers offering these qualifications are in the further education (FE) sector. This is an important point because as previously mentioned, institutional status matters (Keep, 2018a), and brings with it certain assessment and grading systems. To illustrate, GCSEs are generally assessed through written assignments and written exams graded 9 to 1; vocational qualifications tend to be assessed through observation of practical work scenarios or situations and some written assignments graded as competent/not yet competent or with a pass, merit, distinction grading bracket. On completion, T-level students will receive a nationally recognised certificate showing an overall grade of pass, merit or distinction and will include (DfE, 2019b):

- an overall pass grade for the T Level, shown as pass, merit or distinction
- a separate grade for the occupational specialism, shown as pass, merit or distinction
- a separate grade for the core component, using A* to E
- · grades for maths and English qualifications
- · details of the industry placement

While this seems a comprehensive assessment format, the assessment system is not similar enough to A-levels for universities to consider it - Imperial College London and University College London have already said they will not recognise the qualification (Grylls, 2018) – reducing pathways to progression if students want that later option. Even with some more traditional assessment modes incorporated in it, it seems unlikely that T-levels will be seen as the sibling to A-levels, rather the poor cousin.

All of these changes to vocational qualifications and their assessment regimes point to various Governments' beliefs that in order for the vocational and academic routes to have 'parity of esteem' the routes must become similar. This viewpoint belies the nature of the vocational qualifications and the purpose of the route; attempts to equate vocational and academic approaches to education are fundamentally flawed because the learning involved in each is structured differently (Spöttl, 2013) particularly given they have different signalling purposes and currency in the labour market (Méhaut & Winch, 2011). If E&T is to have any result in equalising the potential of students, regardless of the type of qualification, to achieve to their full potential, then constant changes to vocational assessment is not the answer.

The Purpose of VET

In actuality, the under-regulated, complex, and competitive nature of the vocational qualifications market in the UK makes it hard for all stakeholders to understand VET qualifications (Avis, 2009; Bathmaker, 2013) impacting on their standing. This is not just an English phenomenon. And while Hodgson and Spours (2008) argued

¹ https://www.gov.uk/government/publications/providers-selected-to-deliver-t-levels-in-academic-year-2020-to-2021/providers-selected-to-deliver-t-levels-in-academic-year-2020-to-2021

that the UK government efforts to raise the status of VET and qualifications have unfortunately not only failed to make the system more accessible and well-regarded but have rather added confusion about the structure and purpose of VET this could easily be applied to other countries around the world, as could Wolf's summation on the failures of the English VET system:

not despite but because of central government's constant redesign, re-regulation and reorganisation of 14-19 education. [...] This is in spite of unprecedented levels of spending; and after thirty years of politicians proclaiming, repeatedly, their belief in 'parity of esteem' for vocational and academic education (Wolf, 2011, p. 21).

The huge numbers of young people and adults who pursue vocational schemes deserve better: good quality vocational qualifications are good for society in terms of individual levels of achievement, self-worth, and agency (Winch, 2014). Consequently, calls for parity of esteem of the two routes (Elliott Major & Machin, 2018, p. 181) while admirable, belie the fundamental intention and importance of each, and as Wolf (DfE, 2011) pointed out, everyone can see through it.

A key problem, in addition to the ones already outlined, is the way the narrative of the vocational and academic is pitted against each other. Alison Fuller (2015, p. 233) rightly points out:

The existence of the academic and vocational educational pathways raises the issue of comparative status between the two routes. The dualistic nature of much of the discourse around vocational education (Clarke & Winch, 2007; Pring, 2007; Young, 2004) represented by the academic-vocational, theory-practice, mental-manual, education-training binaries is unhelpful.

This dualistic discourse hinders VET's purpose, which is already broad-ranging and hotly debated alongside a definition (McGrath, 2012). Yet, countries around the world are focussed on improving the standing of VET as a route in its own right despite the factors outlined earlier in this chapter. A recent study by James Relly et al. (2021) of seven countries – Austria, Brazil, France, Hungary, India, Japan, and South Korea – showed raising the standing of VET was a policy priority. A key element was the way in which each of the countries was using WorldSkills Competitions² as a lever to achieve this. The way in which skills competitions can be used to increase the attractiveness of VET has been argued elsewhere (Chankseliani et al., 2015) so full detail will not be provided here. In sum, using an Enhancement Strategy (Lasonen & Gordon, 2009) the key finding was that 'instead of promoting VET by seeking alignment of the vocational with academic education, the enhancement strategy places the distinctive characteristics of vocationalism in the spotlight. It builds on reinforcing and promoting the unique ethos of VET through high standards of teaching and learning. It is the enhancement of the attractiveness of VET

²International skills competitions started in post-WWII Europe. In 1950 the first *Skill Olympics* were held between Portugal and Spain. Five other European countries joined the international skills competition in 1953 and it subsequently evolved into a global contest known as the WorldSkills Competition (WSC). In 2019, the WSC Kazan competition brought together 1354 contestants mostly aged from 18 to 21 from 63 countries and regions, competing publicly and demonstrating excellence in more than 56 skill areas. The WSC are held every 2 years.

rather than the establishment of parity of esteem' that becomes the focus as 'the development of high standards of vocational teaching and learning, i.e., the development of vocational excellence, is at the core of the enhancement strategy. Skills competitions contribute to the development of vocational excellence in the same way as the high-quality apprenticeship programmes at Rolls Royce, BT or Nissan' (Chankseliani et al., 2015, p. 588).

Vocational excellence exists in all VET systems, albeit more often than not in pockets. In successful skills systems we can see a range of close relationships and dynamics between system-level policies, productivity and economic growth, industry needs, employer perspectives, technological developments, and individual teaching practice. Indeed, Billett (2014, p.1) has argued:

Vocational education is an important and worthwhile project. Its goals and processes are directed to meeting salient societal, economic and personal purposes. These purposes have long been recognised as developing the capacities for providing the goods and services societies need to function and secure their continuity and progress (Ainley, 1990; Bennett, 1938; Stow, 1847). Such purposes also extend to assisting individuals identify with, become competent in occupations so they might become their vocations (Dewey, 1916) and, more recently, for sustaining occupational capacities and employability across lengthening working lives (OECD, 2006).

Combing this understanding of the purposes of VET with the elements needed for a successful skills system is a good starting point for policymakers to understand, to resource, and then meaningfully integrate policy into a wider system of education and workforce development, thus giving it genuine standing. Underpinning this imperative for standing of the VET route is the understanding that quality of provision and teaching standards are inextricably linked to esteem. In this way, employers, E&T providers, and policy makers must work together. This requires a long-term strategic approach where a skills economy stands alongside the knowledge economy taking into account the entire tertiary landscape where skills are developed, the relationship between productivity and the shifting dynamics between skills supply and demand, the changing nature of work, spatial dynamics, and local economic variance. Having a vocational route that has standing in society matters because the young people taking the VET route matter.

References

Ainley, P. (1990). Vocational education and training. Cassells Education Limited.

Allais, S. (2017). Labour market outcomes of national qualifications frameworks in six countries. *Journal of Education and Work, 30*(5), 457–470. https://doi.org/10.1080/1363908 0.2016.1243232

Ashley, L., & Empson, L. (2017). Understanding social exclusion in elite professional service firms: Field level dynamics and the 'professional project'. Work, Employment and Society, 31(2), 211–229. https://doi.org/10.1177/0950017015621480

Atkins, L., & Flint, K. (2015). Nothing changes: Perceptions of vocational education in England. International Journal of Training Research, 13(1), 35–48. https://doi.org/10.1080/1448022 0.2015.1051344 60

Audickus, L., Cracknell, R., & Bellis, A. (2019). *Social background of MPs 1979–2017*. House of Commons Library Briefing Paper Number CBP 7483.

- Avis, J. (2009). Further education: Policy hysteria, competitiveness and performativity. *British Journal of Sociology of Education*, 30(5), 653–662.
- Bathmaker, A. (2013). Defining "knowledge" in vocational education qualifications in England: An analysis of key stakeholders and their constructions of knowledge, purposes and content. *Journal of Vocational Education and Training*, 65(1), 87–107.
- Battiston, A., Hedges, S., Lazarowicz, T., & Speckesser, S. (2020). *Peer effects and social influence in post-16 educational choice* (CVER Research Disucssion Paper 025). CVER. http://cver.lse.ac.uk/textonly/cver/pubs/cverdp025.pdf
- Bennett, C. A. (1938). The ancestry of vocational education. In E. A. Lee (Ed.), *Objectives and problems of vocational education* (2nd ed., pp. 1–19). McGraw-Hill Book.
- Billett, S. (2009). Realising the educational worth of integrating work experiences in higher education. *Studies in Higher Education*, 34(7), 827–843.
- Billett, S. (2014). The standing of vocational education: Sources of its societal esteem and implications for its enactment. *Journal of Vocational Education & Training*, 66(1), 1–21. https://doi.org/10.1080/13636820.2013.867525
- Billett, S., Dymock, D., Hodge, S., Choy, S., & Le, A. H. (2022). Chapter 6: Shaping young people's decision-making about post-school pathways: Institutional and personal factors. In S. Billett, B. E. Stalder, A. Vibe, S. Choy, S. Hodge, & A. H. Le (Eds.), The standing of vocational education and the occupations it serves: Current concerns and strategies for enhancing that standing. Springer Nature.
- Bosch, G., & Charest, J. (2008). Vocational training and the labour market in liberal and coordinated economies. *Industrial Relations Journal*, 39(5), 428–447. https://doi.org/10.1111/j.1468-2338.2008.00497.x
- Brown, P., Lauder, H., Ashton, D., Yingje, W., & Vincent-Lancrin, S. (2008). Education, gloablisation and the future of the knowledge economy. *European Educational Research Journal*, 7(2), 131–156. https://doi.org/10.2304/eerj.2008.7.2.131
- Cabinet Office. (2011). Opening doors, breaking barriers: A strategy for social mobility. Cabinet Office.
- Chankseliani, M., James Relly, S., & Laczik, A. (2015). Overcoming vocational prejudice: How can skills competitions improve the attractiveness of vocational education and training in the UK? *British Educational Research Journal*, 42(4).
- Clarke, L., & Winch, C. (Eds.). (2007). Vocational education: International approaches, developments and systems. Routledge.
- Clifton, J., Thompson, S., & Thorley, C. (2014). Winning the global race? Jobs, skills and the importance of vocational education. IPPR.
- Crawford, C., Johnson, P., Machin, S., & Vignoles, A. (2011). Social mobility: A literature review. BIS.
- Davies, P., & Ercolani, M. G. (2021). Gender, motivation and labour market beliefs in higher education choices. *Higher Education*, 82, 127–144. https://doi.org/10.1007/s10734-020-00625-z
- DBIS/DfE (2016). *Post-16 skills plan.* https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/536043/Post-16_Skills_Plan.pdf
- Department for Education (DfE). (2011). Review of vocational education The Wolf report. https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/180504/DFE-00031-2011.pdf
- Department for Education (DfE). (2019a). Destinations of key stage 4 and 16-18 students, England, 2017/18, https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/839989/Destinations_of_KS4_and_16_to_18_students_2018_-_main_text.pdf
- DfE. (2019b). *Introduction of T levels*. https://www.gov.uk/government/publications/introduction-of-t-levels/introduction-of-t-levels

- DfE. (2021). Skills for jobs. White Paper. Retrieved August 16, https://assets.publishing.service. gov.uk/government/uploads/system/uploads/attachment_data/file/957856/Skills_for_jobs_ lifelong_learning_for_opportunity_and_growth_web_version_.pdf
- DfE/DBIS. (2013). The future of apprenticeships in England: Next steps form the Richard review. https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/190632/bis-13-577-the-future-of-apprenticeships-in-england-next-steps-from-the-richard-review.pdf
- Dewey, J. (1916). Democracy and education. The Free Press.
- Edwards, T. (2008). A sociology of our times? *British Journal of Sociology of Education*, 29(4), 369–379. https://doi.org/10.1080/01425690802160237
- Elliott Major, L., & Machin, S. (2018). Social mobility and its enemies. Penguin Random House.
- Espinoza, H., & Speckesser, S. (2019). A comparison of earning related to higher level vocational/ technical and academic education (CVER Research Discussion Paper). CVER. http://cver.lse.ac.uk/textonly/cver/pubs/cverdp019.pdf
- Fisher, R., & Simmons, R. (2012). Liberal conservatism, vocationalism and further education in England. *Globalisation, Societies and Education, 10*(1), 31–51.
- Fuller, A. (2015). Vocational education. In J. D. Wright (Ed.), *International encyclopaedia of the social & behavioural sciences* (2nd education, Vol. 25). Elsevier.
- Grylls, B. (2018). Could the roll-out of the T-Level help to change the face of technical education in the UK? http://www.newelectronics.co.uk/electronics-technology/could-the-roll-out-of-the-t-level-help-to-change-the-face-of-technical-education-in-the-uk/176631/
- Gunter, H., Hall, D., & Mills, C. (2015). Consultants, consultancy and consultocracy in education policymaking in England. *Journal of Education Policy*, 30(4), 518–539. https://doi.org/10.108 0/02680939.2014.963163
- Hodgson, A., & Spours, K. (2008). Education and training 14-19: Curriculum, qualifications and organization. SAGE.
- Holmes, C., & Mayhew, K. (2016). The economics of higher education. Oxford Review of Economic Policy, 32(4), 475–496.
- Hyland, T., & Winch, C. (2007). A guide to vocational education and training. Continuum.
- James Relly, S., Robson, J., Emms, K., Laczik, A., Randhawa, A., Aizawa, I., Dong, L., Hwang, S., Pinto, V., & Zlock, L. (2021). Drivers of technical excellence in the skills economy. WorldSkills UK.
- Keep, E. (2020). Employers, the ghost at the feast. *Journal of Education and Work, 33*(7–8), 500–506. https://doi.org/10.1080/13639080.2020.1852501
- Keep, E. (2018a). Scripting the future Exploring potential strategic leadership responses to the marketisation of English FE and vocational provision. FETL. http://fetl.org.uk/wp-content/ uploads/2018/07/FETL_scriptingthefuture-web.pdf
- Keep, E. (2018b). The missing middle gap: what's happening with levels 4 and 5. FE Week. https://feweek.co.uk/2018/10/22/the-missing-middle-gap-whats-happening-with-level-4-and-5/
- Keep, E., & James, S. (2010). Recruitment and selection The great neglected topic (SKOPE Research Paper No. 88). SKOPE.
- Lasonen, J., & Gordon, J. (2009). Improving the attractiveness and image of VET. In *Modernising vocational education and training: Fourth report on vocational training research in Europe*. European Union.
- Lewis, T. (1994). Bridging the liberal/vocational divide: An examination of recent British and American versions of an old debate. *Oxford Review of Education*, 20(2), 199–217.
- Mazenod, A. (2016). Education or training? A comparative perspective on apprenticeships in England. *Journal of Vocational Education & Training*, 68(1), 102–117.
- McGrath, S. (2012). Vocational education and training for development; A policy in need of a theory? *International Journal of Educational Development*, 32(5), 623–631.
- Méhaut, P., & Winch, C. (2011). EU initiatives in cross-national recognition of skills and qualifications. In M. Brockmann, L. Clarke, & C. Winch, with G. Hanf, P. Méhaut, & A. Westerhuis

62

- (Eds.), Knowledge, skills and competence in the European labour market: What's in a vocational qualification? Routledge.
- OECD (Organisation for Economic Co-operation and Development). (2006). Live longer, work longer: A synthesis report. OECD.
- OECD (2017). OECD economic surveys United Kingdom. Retrieved August 15, www.oecd.org/eco/surveys/economic-survey-united-kingdom.htm
- OECD/ILO. (2017). Engaging employers in apprenticeship opportunities: Making it happen locally. OECD Publishing. https://doi.org/10.1787/9789264266681-en
- Patrignani, P., Conlon, G., & Hedges, S. (2017). The earnings differentials associated with vocational education and training using the Longitudinal Education Outcomes data (CVER Research Discussion Paper 007). CVER. http://cver.lse.ac.uk/textonly/cver/pubs/cverdp007.pdf
- Pring, R. (2007). 14-19 and lifelong learning: Distinguishing between academic and vocational learning. In L. Clarke & C. Winch (Eds.), Vocational education: International approaches, developments and systems (pp. 118–132). Routledge.
- Pring, R., Hayward, G., Hodgson, A., Johnson, J., Keep, E., Oancea, A., & Wilde, S. (2009). Education for all: The future of education and training for 14-19 year olds. Routledge.
- Raffe, D. (1990). The context of the Youth Training Scheme: an analysis of its strategy and development. In D. Glesson (Ed.), *Training and its alternatives* (pp. 58–75). Open University Press.
- Raffe, D., & Spours, K. (eds.) (2007). *Policy-making and policy learning in 14-19 education*. Institute of Education Press. Bedford Way Papers.
- Rutter, T. (2013). Why don't parents get the value of apprenticeships? The Guardian. Retrieved from http://www.theguardian.com/education/2013/jul/25/apprenticeships-poorly-perceived
- Ryan, P., & Unwin, L. (2001). Apprenticeship in the British 'training market'. *National Institute for Economic Review*, 178, 99–115.
- Silver, H., & Brennan, J. (1988). A liberal vocationalism. Methuen.
- Shields, R., & Masardo, A. (2018). False equivalence? Differences in the post-16 qualifications market and outcomes in higher education. *Educational Review*, 70(2), 149–166.
- Spöttl, G. (2013). Permeability between VET and higher education A way of human resource development. *European Journal of Training and Development*, *37*(5), 454–471.
- Stow, D. (1847). National education: The duty of England in regard to the moral and intellectual elevation of the poor and working classes, teaching or training? J. Hatchard.
- Sykes, R. (2009). The Sir Richard Sykes Review, Commissioned by the Conservative Party. Available at: http://www.conservatives.com
- Taysum, A. (2020). An Innovative strategy to re-build trust in educational governance systems after 40 years of English destabilising rapid reforms. *Journal of Educational Administration* and History, 52(1), 145–161. https://doi.org/10.1080/00220620.2019.1605341
- Tholen, G., James, S., Warhurst, C., & Commander, J. (2016). Higher education, graduate skills and the skills of graduates: The case of graduates as residential sales estate agents. *British Educational Research Journal*, 42(3), 508–523.
- Virolainen, M., & Stenström, M.-L. (2014). Finnish vocational education and training in comparison: Strengths and weaknesses. *International Journal for Research in Vocational Education and Training*, 1(2).
- Williams, G., & Filippakou, O. (2010). Higher education and UK elite formation in the twentieth century. *High Education*, 59, 1–20. https://doi.org/10.1007/s10734-009-9229-6
- Winch, C. (2011) Skill A concept manufactured in England? In M. Brockmann, L. Clarke, & C. Winch, with G. Hanf, P. Méhaut, & A. Westerhuis (Eds.), *Knowledge, skills and competence in the European labour market: What's in a vocational qualification?* Routledge.
- Winch, C. (2014). Education and broad concepts of agency. *Educational Philosophy and Theory*, 46(6), 569–583. https://doi.org/10.1080/00131857.2013.779211
- Wolf, A. (2002). Does education matter? Myths about education and economic growth. Penguin Books.
- Wolf, A. (2011). Review of vocational education: The Wolf report. BIS.
- Young, M. (2004). Conceptualizing vocational knowledge: some theoretical considerations. In H. Rainbird, A. Fuller, & A. Munro (Eds.), *Workplace learning in context*. Routledge.

Chapter 4 Improving the Standing of VET: Perspectives from Countries with Developing Economies



Stephen Billett and Anh Hai Le

Abstract The standing of vocational education and training (VET) is often quite low in many countries. This includes those with developing economies as well those with advanced industrial economies. The outcomes of this low standing include a reluctance of young people and their parents to consider VET as a viable educational option, viewing it as a second option, at best. In addition, this standing can lead to reduced government, industry and enterprise sponsorship and support of VET, thereby adding to its lack of attractiveness for young people. Yet, there is often a mismatch between the worth and benefits of VET and decision-making about it. Consequently, it is necessary to identify factors shaping the standing of VET and initiatives to be enacted for this important educational sector to be considered on its own merits, and supported more by the community, government and employers. Hence, it is more likely to achieve its educational goals for young people, their communities, workplaces and nations. This chapter presents sets of proposals and strategies to enhance the standing of VET that were advanced in a virtual conference organised by UNESCO-UNEVOC. Entitled 'Improving the standing of VET', the conference was held between the 16 to 24 July 2018. It had 346 delegates from 82 countries, most of whom have developing economies. Delegates shared their perspectives about the standing of VET and offered suggestions on how to make VET more attractive to young people in their countries, and elsewhere. The challenges to be overcome often have entrenched historical, cultural and institutional sources. Constructive contributions were posted by delegates from a wide range of countries, mainly from those with developing economies. The discussions in the chapter progress under five headings: (i) the standing of VET and its consequences, (ii) factors shaping the standing of VET, (iii) perspectives of young people, their parents and familiars, (iv) policies and practices that might enhance the standing of VET, and (v) evaluating the impact of those policies and practices.

S. Billett (\boxtimes) · A. H. Le

Griffith University, Brisbane, QLD, Australia

e-mail: s.billett@griffith.edu.au

Keywords Standing of vocational education · UNESCO-UNEVOC · Young people's decision-making · Developing economies

The Importance of VET's Standing

When compared with other education sectors, the standing of vocational education (VET) is often quite low across many countries. This is the case in both countries with advanced industrial economies as well those that are described as having developing economies. The consequences of this low standing can be profound as are discussed within the contributions to this edited volume. They include how governments, industry, enterprises and communities view, support, fund and engage with VET programmes. A key and growing concern is that in an era of growing aspiration in countries with both advanced and developing industrial and social economic bases this standing has negative impacts on young people's and their parents' interest and participation in VET.

Yet, concurrently, in many countries with advanced economies there is a growing shortage of skilled workers to meet the requirements of enterprises and to serve communities' needs. For instance, the UK is experiencing declining levels of participation in courses for the advanced technical skills required for its economic activities (Wolf, 2016). German enterprises are experiencing difficulties securing adequate numbers of quality candidates for apprenticeships (Deissinger, 2022). This has led to competition amongst companies to secure such apprentices and the need for public education and publicity campaign by local chambers of commerce to secure apprentices. South Korea has long struggled to attract young people to the manufacturing sector that sustains its economy because of societal sentiments that characterises this kind of work as being socially undesirable, which are often shared across parents and teachers (Cho & Apple, 1998). Yet, these sentiments are also evident in countries with developing modern economies and high levels of youth unemployment. In country studies from a recent UNESCO project (Work-based learning for young people in the Arab region; UNESCO, 2018a, b), the following unsolicited statements were made about the standing of VET:

... there is a vicious cycle of negative standing, low quality and low self-esteem related to VET, its students and even its teachers in the Egyptian society and culture. This phenomenon is well documented and acknowledged, however, very little is being done to create awareness to change this. (El-Ashmawi, 2017, p. 5)

Social perspective towards vocational training in general is negative which led to minimal participation in VET in Jordan. (Rawashdeh, 2017, p. 14)

... VET in Lebanon is socially looked as low standing, and the choice of those who have no choice. (Ghneim, 2017, p. 16)

In general, it is socially looked at the VET sector as low standing, and the choice of those who have no choice: it remains a second option for youngsters.... The image of the apprenticeship training and WBL schemes is looked at in a lower social view. (Palestine) (Jweiles, 2017, p. 6)

It is important to note, however, that the reports from countries in the same study that have well-developed VET systems (Algeria, Morocco and Tunisia) were more positive about its standing (UNESCO, 2018a, b). In this way, even within the same geographical region, the institutional arrangements within countries can bring about distinct perspectives and societal views.

Nevertheless, there is a growing concern across countries with both developing and advanced industrial economies that young people and their parents increasingly prefer higher education over VET as an educational pathway. This preference extends even to those university programmes that have no direct employment outcomes and, potentially, quite limited prospects of employment upon graduation (El-Ashmawi, 2017; Wyman et al., 2017). Yet, these programmes are preferred over participation in VET, which is often viewed as a second choice or last resort. Because of this standing, when VET is enacted in upper secondary school, it competes unfavourably with pathways to university education, and when it is a post-school educational provision, it competes unequally with higher education. This is the case in countries that are struggling to establish a skill based required to provide the kinds of services and goods that taken for granted in those with advanced industrial economies, where the complaint is one of the supplies of sufficient numbers of such workers.

The standing of VET is, therefore, important and shapes how young people select their occupations and how parents, teachers and familiars (e.g., friends and peers) advise young people about pathways into further study or working life. Beyond narrowing the range of educational, occupational and work options for young people, the low standing of much of VET and its unattractiveness for young people is inhibiting the provision of a range of viable education pathways for young people in both developing and developed economies. One outcome is the lack of skill development that limits countries from achieving their social and economic goals and preventing enterprises from securing the kinds of skilled workers required for maintaining their viability. Consequently, it is important to know how information about VET can be more informed and advice about VET be more impartial and how its standing might be enhanced. Addressing these sets of concerns about information, impartiality and heightened societal standing can assist VET to be considered more impartially as a viable educational pathway. This includes informing young people, parents, employers and educators about its potential as an educational pathway to worthwhile work, employment and contributions to societal and economic imperatives.

These issues are perhaps no more relevant in countries with developing economies who need to establish strong economic bases founded on occupational capacities that can serve their communities through productive employment, utilisation, viable and sustainable workplaces and contributing to regional and national economic viability. This chapter discusses the proceedings and outcomes of a virtual conference organised by UNESCO-UNEVOC in 2018 that engaged delegates from 82 countries, most of which would be categorised as having developing economies. The focus for the conference was on issues associated with the standing of vocational education and training and how it can be viewed as a more legitimate and worthwhile

provision of education. The chapter commences by engaging with literature offering a range of perspectives that shaped the focus for the contributions to and findings arising from this virtual conference. Then, it offers what is, a brief rehearsal of international perspectives associated with this central issue for vocational education, before describing the procedures used within the virtual conference to elicit responses, and then drawing out findings from the contributions of delegates, most of whom were from countries with developing economies. It concludes with proposing some broad strategies through which the standing of vocational education might be addressed nationally, regionally, and locally albeit in country-specific ways.

International Perspectives on the Status of VET

Discussions in the literature suggests that to overcome the perceived low status of vocational education, emphasis should be placed on changing societal sentiments and perceptions, so that students, teachers and parents view it as a viable and worthwhile educational provision. Much of this discussion focuses on the inherent privileging of higher education as a preferred post-school pathway in both developed and developing countries (Cedefop, 2017; UNESCO, 2018a, b). As foreshadowed, such sentiments shape how individuals elect to consider, there alone, engage with and participate in vocational education provisions (UNESCO, 2018a, b; UNESCO-UNEVOC, 2018). What these discussions emphasise is that in an era of heightened aspirations for young people and their parents, vocational education and the occupations it serves have become a less preferred or non-preferred option for postschool pathways in many countries. As noted, this concern exists even in a country such as Germany where vocational education is regarded as having relatively high status (Deissinger & Ott, 2016). However, it is also prevalent in countries with developing economies many of which have vocational education embedded within schooling and as an alternative pathway to university entrance.

The sentiments projected by schools and teachers are often held to be complicit in devaluing vocational education as a worthwhile pathway for 'good 'students (Dalley-Trim et al., 2008). Such is the concern that a concerted, coordinated effort that uses inclusive, non-stigmatising, non-deficit language is being suggested, while also emphasising the full range of opportunities and school pathways is now required (Gore et al., 2017). These authors propose that a change in institutional practices is necessary to improve perceptions about and increase interest in vocational education, as they found that students from a young age form the impression that university is preferred over vocational education. Webb et al. (2015) also explicitly propose raising the status of and increasing information about vocational education options available to young people to eliminate 'assumptions about the "type" of students for whom vocational education is suitable (p. 53). The call to raise the status of vocational education mirror recommendations made earlier by Maxwell et al. (2000), who reported on how decisions were made about choosing vocational education and training programs. In these studies, and others (e.g.,

Clement, 2014), the kinds of suggestions or messages projected by the likes of teachers and parents are influential because they are pervasive and ubiquitous. Snowden and Lewis (2015) examined two types of messages being projected about post-school pathways to students from social and economic backgrounds who do not normally participate in higher education. Distinct differences were found between how university education and vocational education were represented: 'elite and exclusive' versus 'having less rigorous academic standards suited to those who aspire to develop trade employment skills'; such messages undermine vocational education participation goals and contribute to 'an increasing social divide where educational achievement is the fault line' (Snowden & Lewis, 2015, p. 585).

This issue also has consequences for young people. A growing proportion of young people in many countries are not considering or engaging with vocational education leading to misalignments across tertiary education. The consequences include mismatches between the capacities being developed through tertiary education and the available employment opportunities (Schweri et al., 2020; Somers et al., 2019), and the potential for extended and circuitous post-school pathways for young people (Billett, 2014). The perceived lower standing of vocational education has an impact in terms of the support given to vocational education by governments and schools, and how it is engaged with by young people and their parents (Cedefop, 2014). Central here is that some post-school options afforded by universities may not lead to employable outcomes. Yet, it is unclear whether the decision-making by these young people is wholly informed and helpful. Indeed, the changing preference to engage in higher education rather than vocational education seems to be a product of a range of broad social factors, including high aspirations and sentiments about education and work manifested by practices exercised within schools, families and interactions with familiars (e.g., parents, teachers, friends). All of this emphasises how familiars, particularly those who have repeated and ongoing interactions with young people (e.g., parents, schoolteachers), can shape their considerations of postschool pathways. The concern is the degree by which these familiars are informed, engaged and able to provide impartial advice for young people in countries with developing and developed economies.

Clement (2014) identifies four key influences on young people's decision-making about post-school pathways: (i) parents, (ii) schoolteachers, (iii) work experience, and (iv) school guidance officers. These are all close or proximal and potentially influential sources of advice, albeit often unintentionally. Beyond parents, most studies indicate that practices in schools and the actions of teachers and career guidance counsellors are important in young people's decision-making about post-school pathways (e.g., Baxter, 2017; Bisson & Stubley, 2019; Bowen & Kidd, 2017; Brown, 2017; Galliott, 2017; Gore et al., 2017; Lamb et al., 2018). Either advertently or inadvertently, students' decision-making is particularly shaped by teachers' preferences and experiences that are suggested through their interactions (Cedefop, 2014; Clement, 2014) and these tend to privilege higher education and militate against vocational education as viable post-school options. In the Victorian state parliamentary inquiry (2018), employers and industry groups also expressed concerns about the quality and kind of career advice in schools. Fuller et al. (2014)

claim that (a) career development processes at schools are providing inaccurate information, leading students to make poor career choices; (b) career practitioners at schools are unaware of the career options available within industries and how the nature of work in industries is changing; and (c) schools appear to direct students towards university rather than apprenticeships and vocational education because trades are seen as 'second-rate' options.

Parents are reported in most studies to be the key influences on young people's decision-making (Clement, 2014; Ulrich et al., 2018). Yet, the degree by which that advice is informed, engaged with and influential varies. So, whilst the practices of parents and familiars are central to this decision-making, their advice might not be informed or impartial. For example, Ulrich et al. (2018) found that the influence of parents on young people's career choices is greater than that of teachers, career counsellors or occupation-specific information from online sources. However, there are clear differences between the practices of parents who are informed, engaged and influential in securing university entrance for their children, and those who are less informed, engaged, and have lower expectations of post-school pathways (Baxter, 2017; Gemici et al., 2014). So, more than just provisions of advice, some sources are found to be more influential than others.

In all, it is difficult not to conclude that what is being suggested to young people, either explicitly or implicitly through everyday conversations and interactions with teachers, parents and other familiars, influences their decision-making about vocational education and the occupations it serves. It is acknowledged that teachers will want to encourage their students, for them to aspire to great achievements and to extend themselves fully. Yet, this decision-making does not necessarily progress in an informed and considered way. Instead, it is premised on the personal experiences and preferences of parents and teachers (Billett et al., 2020). The risk here is that what is preferred and privileged by familiars who are in positions of influence (e.g., teachers, parents) may lead to uninformed decision-making and not being premised on young people's interests and capacities. So, this decision-making is for young people making about what kind of work or occupations they would like to engage in and are best suited to, and what educational pathway will prepare them to achieve those goals. This is particularly important for what occurs in countries with developing economies given the scope of the skill development challenges they confront.

UNESCO-UNEVOC Virtual Conference

Organised as part of World Youth Skills Day 2018, a virtual conference was held to engage with the issue associated with the standing of VET by initiating, guiding and synthesising a range of perspectives, evidence and advice about the factors influencing the standing of VET and the occupations it serves and, importantly how these can be addressed to make VET attractive to young people. The virtual conference was hosted by UNESCO-UNEVOC from 16 to 24 July 2018 and

activities over the nine-day period were moderated by Professor Stephen Billett from Griffith University, Australia. The conference attracted 346 delegates from 82 countries, and many participated in online discussions. The intended outcomes of the conference were for delegates to: (i) understand the factors influencing the standing of VET, and the impact this standing has on individuals, business and society; (ii) appreciate some of the factors and challenges impacting the decisions of young people when choosing their career/education path; (iii) identify suitable measures that can help improve the standing of VET in their context; and (iii) explore ways to assess the impact of measures to improve the standing of VET.

The conference provided opportunities for delegates to share perspectives and information about the standing of VET and to offer suggestions on how that standing could be enhanced in their countries, and elsewhere, to make VET more attractive to young people. The discussions were informed by earlier studies and discussions (TVET Forum threads and other workshops) and by resources provided throughout the conference. The contributions to and outcomes of the discussion on each topic in each session were made available to delegates prior to and progressively during the virtual conference to provide an iterative and evolving process. Additionally, other resources and links to initiatives undertaken globally associated with this important topic were shared. The structure and sequencing of the virtual conference's events were founded on the five topics that comprised the focus for the activities across the nine-day event, including (i) the standing of VET and its consequences, (ii) factors shaping the standing of VET, (iii) perspectives of young people, their parents and familiars, (iv) policies and practices that might enhance the standing of VET, and (v) evaluating the impact of those policies and practices. These were the focus of structured interactions across the 9 days which comprised postings by delegates, discussions amongst them and the moderator offering written syntheses on each of these activities. It is these syntheses that are reported in the sections below.

Findings and Discussion

The findings reported here follow those that were the topics of the virtual conference: (i) the consequences of VET's standing, (ii) factors shaping the standing of VET, (iii) perspectives of young people, their parents and familiars, (iv) policies and practices to enhance the standing of VET, and (v) evaluating the impact of those policies and practices.

The Standing of VET and Its Consequences

Delegates from across a range of continents and countries, mainly with developing economies, consistently reported that the standing of VET is low, and its consequences are variously manifested in the decisions young people make and the

sentiments expressed by their familiars. Overall, with a few exceptions, delegates report that the current standing of VET limits its attractiveness to young people, their parents, and even employers. The exceptions are the few instances where VET is associated with more prestigious occupations or institutions and is associated with occupations or work that is attractive to young people and their parents. Yet, overwhelmingly, across countries who aspiring themselves to build more developed economies, vocational education which is central to that goal is perceived to be of low standing. Some of the contributions from across these countries illustrating these sentiments are presented in Table 4.1.

Typically, the delegates reported that VET is seen as a 'second best' option for young people. It is the option for those who are less educated and competent, for those who failed at school or with a profile associated with migrant communities (i.e., the Netherlands), or for 'lower castes' (i.e., India) as expressed by delegates from those countries. These perceptions have contributed to and led to a negative media image, low self-esteem among VET students, and for young people or their parents preferring other options in upper secondary or post-secondary schooling.

Some delegates from African countries also reported that employers have high (i.e., unrealistic) demands and want employees with degrees, thereby reinforcing young people to seek pathways to higher education. Unsurprisingly, VET is sometimes viewed as a dead-end and there is a lack of clarity of the worth of VET by students, parents and employers. Noteworthy here is that in many of the countries represented by delegates at the conference, vocational education is something that occurs within high schools and is positioned alongside the strand of schooling that might lead to university entrance. So, unlike what occurs in countries with developed economies that have dedicated vocational education institutions, in many of these countries it exists within schools and without the specific institutional and educational focus on the development of occupational knowledge. It also worth

Table 4.1 Societal sentiments about VET

Representative quotes	Country
VET is still mostly seen as being suited for learners who are "academically challenged" and whose only option is to "work with their hands".	Barbados
In China, the standing of VET is low or poor, compared with the corresponding levels of education [].	China
To many people, the vocational trades are viewed as "hands dirty" types of skills.	Ethiopia
[] as we all may know VET is, at best, viewed as a second or non-preferred choice.	Ghana
There are very few youths who want to take up Vocational and Technical Training because they do not want to be viewed as failures.	Kenya
The overall perception of VET in Nigeria is generally seen to be poor. This is characterised by low enrolment of students, apparent lack of interest in the field by students and parents, slim chances of career progression from technical colleges to universities []. Most Nigerian parents view vocational courses as the last resort for their wards.	Nigeria
In Romania, despite the programmatic drive to reshape the standing of initial VET, it has a discrediting societal bias.	Romania

noting that, in some countries (i.e., Saudi Arabia and the Netherlands), higher education institutions are now offering degrees referred to as 'applied learning', making it more difficult to attract students to VET programmes that are perceived to be lower level than applied learning degrees in higher education.

Specific Consequences

There are a series of consequences because of this standing that have been acknowledged elsewhere (Billett, 2014; Clement, 2014; Wolf, 2016) including support from government, industry and employers and attractiveness to young people and their parents. What was advanced and discussed by the respondents in the virtual conference was of a similar kind. All of this inhibits VET's role in addressing the global problem of youth unemployment, let alone the task of engaging young people in developing skilful knowledge of the kind required for occupational practice. The delegates provided a range of consequences of this low standing which, when collated, forms the list that is presented in Box 4.1. The sources of these sentiments are embedded in historical, cultural and institutional factors that differ in form and consequences across nation states.

Box 4.1: Consequences of the Low Standing of VET

- lack of clarity about the worth of VET by students, parents and employers
- only for underperforming young people no pathways to higher education
- employers have high demands and want employees with degrees
- young people prefer pathways to higher education
- higher education is offering degrees referred to as applied learning making it more difficult to attract students to VET
- last resort for school failures and dropouts
- VET provisions not meeting labour market requirements
- discrepancies in the quality of VET provisions
- VET institutions lack the resources to provide adequate preparation for work
- parents are disengaged
- few options to engage internationally
- · low self-esteem of VET students
- negative media image
- VET graduates get caught up in a cycle of unemployment/low-status work
- · low student enrolment
- low expectations of VET teachers in terms of work experience
- easy entry and potentially lower expectations often lead to limited outcomes from VET programmes
- not able to assist the large numbers of young people who are unemployed
- underdeveloped policy for VET
- emphasis on immediate employment not occupational career development
- · lack of acceptance by employers
- lack of fulfilment by VET students

Instances of the vicious cycle of low standing that El-Ashmawi (2017) referred to in Egypt and consequent focus and quality of the VET provisions were also reported, particularly by contributors from African countries. They proposed that: (a) VET provisions are not always meeting labour market requirements; (b) discrepancies and inconsistencies exist in the quality of VET provisions; (c) VET institutions lack the resources to provide adequate preparation for employment/ work; and (d) students have few options to engage internationally through VET. It was also claimed that many teachers in VET have limited work experience in the occupations in which they educate young people. Easy entry into VET programmes and low expectations by teachers also are reported as leading to poor outcomes from these programmes that then perpetuate its relatively low standing.

For these reasons, on the one hand, VET is sometimes unable to assist young unemployed people; on the other hand, where the educational emphasis is on immediate employment, it is not perceived to be offering occupational career development. So, either way, VET is seen as not securing the kinds of fulfilment desired by young people. All these issues serve to perpetuate the low standing of VET.

Factors Shaping the Standing of VET

The contributions from delegates representing countries with diverse economic and social circumstances and from ensuing discussions suggest that the standing of VET is shaped by historical (e.g., colonial, class-based, caste-based), cultural (e.g., preference for 'clean', high-status occupations) and institutional (e.g., level of education, remuneration) factors and the particular complex of factors that shape how that is manifested in each country. These factors, moreover, are often sustained and even exacerbated by current educational arrangements. This is evident when VET in upper secondary schooling is competing against 'academic' streams, and in post-school provisions competing against the attractiveness of a university education for examples. The virtual conference delegates suggested a range of sources of the low standing of VET and made suggestions about its redress.

Historical Factors

A delegate from Norway suggested that the legacy of vocational education, that it was used in colonial times as an educational tool to both pacify and capitalise on the available labour by colonial authorities, is still strong and causes disaffection with VET. This delegate also claimed that the recent use of educational models, such as competency-based training, emphasises utility and organising the 'easy' forms of knowledge perceived to be required for the occupations that VET serves, thereby eroding its status. A British Virgin Islands' delegate also referred to historical legacies that have formed strong cultural sentiments about occupations, what constitutes worthwhile work, and educational pathways, commenting that particular

forms of work (service) have a low standing even though these are central to the economy. This again emphasises links between the standing of VET and the occupations it serves. This delegate also pointed to the essential nature of these skills in times of natural catastrophes, and the reliance upon these workers to rebuild the infrastructure upon which their island society is sustained.

Institutional Factors

A delegate from the Netherlands suggested that institutional siloing within education was shaping its standing, noting that VET graduates became more marketable when: (a) they had undergraduate level qualifications; and (b) the content and experiences in their courses made them marketable. From the United Arab Emirates (UAE), it was suggested that the separation of vocational education from general education is a source of the former's low status. However, the same set of characteristics draws complaints when applied to other forms of work that are seen to be less prestigious according to a delegate from Barbados. This indicates that issues associated with the attractiveness of occupations are likely to be central to enhancing the standing of VET. The delegate from the UAE proposed that appropriate and attractive institutional and qualification measures, when applied to VET, might assist enhancing its standing.

A delegate from Nigeria provided a comprehensive set of contributions comprising institutional factors. They stated that the standing of VET is constrained by: (a) the educational institutions' ability to offer attractive and worthwhile educational revision; (b) the lack of understanding within the community, particularly one that has had no direct interaction with VET; (c) the lack of specialist teachers; and (d) the weak initial and ongoing development of teachers that restricts their ability to offer relevant or worthwhile experiences. They also suggested remedies in the form of: (a) educational institutions being left alone to focus on the provision of education free of external interference; (b) VET workforce members placing their professional obligations ahead of personal ones; (c) VET institutions being adequately funded and resourced; (d) having compulsory post-school pathways for students not moving directly into work or higher education; (e) VET programmes including entrepreneurialism and business practices; and (f) having measures of performance pertinent to the particular country. Such a set of concerns indicates that this issue cannot be addressed by individual effort alone, and requires a concerted action to change societal views, provide adequate support and have governance that can offer quality educational provisions to young people.

A delegate from Barbados also referred to institutional arrangements. They critiqued education provisions that are ineffective in providing for the needs of learners who struggle to meet the performance requirements of those institutions. This, they proposed, is becoming accentuated with VET provisions now having entry requirements that make course entry more difficult. This institutional preference is then directing parents and young people's choices. They outlined a series of measures to have VET provisions at all levels of education, yet also to include 'general'

education provisions within these levels of education. This, they noted, includes having nationally coherent qualification frameworks, career advice and curriculum formation. As above, the issues of national governance and regulation of educational provisions come to the fore here. Two delegates from Tanzania also referred to institutional problems associated with: (a) the alignment of VET programmes with employment opportunities; (b) lack of secure funding and unwillingness of social partners, such as employers, to engage productively; and (c) those employers that do are fewer in number than the demand requires. They also referred to concerns about: (a) the quality of the educational provision, (b) teachers' experience and their occupational and pedagogic skills, (c) students' ability to access VET provisions, and, perhaps not surprisingly, (d) these provisions being held in low regard by young people and their parents. They emphasised that for the standing to be enhanced, issues of the overall quality and relevance of VET provisions need to be addressed, as do the qualification frameworks and engagement with social partners.

Following from these concerns at an institutional and national level, some delegates offered suggestions about how these matters might be redressed. One Nigerian delegate advanced a list of institutional factors that have led to the particular provision of VET and its perceptions within the Nigerian community and proposed a remedy mirroring the progression of general schooling and higher education. This comprised a set of stages of VET - from basic to more specialised occupational preparation. Those remedies extend to requiring a more systematic approach to VET that encompasses the advice and engagement of social partners, and for this to be accompanied by processes that enhance standing and engagement with all streams of Nigerian society. Another delegate from Nigeria summarised much of what other contributors have proposed by offering a typology of institutional, parental, and societal factors shaping the standing of VET in Nigeria, but likely elsewhere. They proposed remedies for the low standing of VET through: (a) more effectively systematising the provision of VET; (b) making its facilities and provisions relevant and contemporary; (c) having public education about VET; and (d) securing governmental support for pathways to employment after graduation. These together, they proposed, would assist enhancing the standing of VET for young people and their parents. Of course, it is important to be reminded that these broad initiatives will have very country specific goals and means of achieving them. For instance, in many of these countries, as mentioned, VET exists within high school options rather than being a separate educational provision. So, there are quite country specific institutional considerations (e.g., privileging of vocational or 'academic' education in schooling), as well as cultural remedies. For instance, it was suggested in some of the African countries that local popstars could be used to promote VET provisions which might be more or less relevant or appropriate in other countries. All this again reinforces the need for a nationally oriented systematic approach to addressing this problem associated with governance, regulation and resourcing, particularly at the local level.

In these ways, the common factors across these contributions are concerns about institutional factors such as poorly resourced VET institutions, teachers lacking

appropriate occupational knowledge and experience, and limited pedagogic capacities. These factors likely must be redressed within each country and in country-specific ways, given the orientation and familiar reality with VET and existing institutional arrangements required to support it. There is also societal action required to inform about and elevate the standing of occupations. Again, it is worth noting that in an earlier study (UNESCO, 2018a, b) countries in the Southern Mediterranean that had existing vocational education systems presented far more positive and engaged approaches to implementation of work-based experiences on vocational education. Hence, it seems these countries were far more ready to engage in reforms associated with VET.

Cultural Factors

There were also a series of cultural factors identified by delegates: the product of societal sentiments comprising the preference of young people, their parents and employers that shape the standing of VET and how they participate in it. It is suggested that young people's decision-making about educational and work pathways is a product of negotiating between personal preferences and rational factors (Clement, 2014). These processes require public education about the educational options and pathways for young people and processes in schools and other places to inform and assist in making decisions about those pathways. These contributions refer to a complex of historical, institutional and cultural factors that initiate and sustain a cycle of low standing for VET. Moreover, currently, the aspirations of young people and their parents reinforce and sustain these factors. These aspirations are often misaligned with the standing of the occupations that VET serves, thereby linking the standing or valuing of these occupations and the education system that prepares young people for them. Hence, when occupations that VET prepares young people for have a low standing, then correspondingly this is transferred to provisions of education. This concern about the views and decisionmaking of young people leads well to the following topic that focuses directly on their views.

Perspectives of Young People, Their Parents and Familiars

The perspectives of young people about the standing of VET are particularly important, because they are its ultimate consumers. Delegates, like earlier reports, consistently stated that how young people come to view VET is shaped by interactions with familiars (e.g., parents, teachers and friends) as well as social media. So, it is these influencing factors that are likely to be the focus for efforts to enhance the standing of VET. Delegates proposed that young people's preferences are not surprising when academic pathways and universities are highly privileged and prized, and most occupations they serve are seen as leading to desirable forms of work (i.e.,

'clean', well-paid and secure) (the Netherlands, India, Nigeria and Singapore). A Chinese delegate claimed that when the courses are attractive and responding to economic need, they attract the kinds of students who could secure university admission. From Nigeria, it was suggested that students should be able to identify and select their preferred occupation and then be supported in achieving that preference. This process needs to be informed and mediated so that young people are realistic and targeted in their choice of educational and work pathways, according to a delegate from the UAE. A detail contribution was provided by a Nigerian delegate who proposed a framework to understand this issue from students' perspectives; added here are analogous contributions from others. It comprises the elements shown in Table 4.2, in the left-hand column with a description in the right.

Delegates from Nigeria and Barbados referred to the Clement (2014) study indicating that the key influencers in young people's decision-making are parents, teachers, work experience and school guidance officers. The first two (i.e., parents and teachers) are particularly important as delegates from a number of countries indicated (e.g., Kenya, Nigeria). This also reflects the finding from an Australian study (see Choy et al., 2022; Hodge et al., 2022). However, whilst influential, parents may have limited and narrow understandings about and perspectives on work life and educational options. Consequently, public education about VET may need to be directed towards parents.

As already noted, many young people's preferences are not surprising. This is because academic pathways and universities are highly privileged and prized, as are many of the occupations that university education serves. These pathways are leading to desirable forms of work (i.e., 'clean', well-paid and secure). So, if VET is viewed as leading to occupations that are viewed (rightly or wrongly) as 'dirty', physical, and highly subordinated labour, it is not surprising that young people are not attracted to them and view as lowly the standing of the educational system that delivers them.

Of course, there is some counter evidence to suggest that when young people can participate effectively in VET and enjoy positive outcomes from it, these perceptions change, and VET is then seen as being highly positive and worthwhile. Moreover, as noted, when the provision of VET is seen to be enacted in prestigious institutions leading to high levels of certification, its standing is far higher. All this sets out the

Element	Description
Kinds of students in VET	Students who are viewed as being not academically strong (Nigeria)
Purposes of VET	Young people view the purposes of VET as: A fall-back, if university education does not provide employment (Nigeria, UAE); Securing their preferred occupation (Nigeria); and Preparing them for the world of work.
Re-privileging	Periods of unemployment prompt fresh consideration of the development

of employable skills of the kind that can be provided through VET.

Table 4.2 Elements to understand young people's views of VET

VET

need to identify policies and practices that can enhance the standing of VET and make it more attractive to young people. This is discussed in the following section.

Policies and Practices to Enhance the Standing of VET

It is evident from the contributions of the virtual conference delegates that there is a complex of factors that shape the standing of VET, and these factors are doing much to make that standing low for young people, their parents, communities and sometimes employers. Those factors include the kind and quality of VET provisions, the standing of the occupations it serves, the high aspirations of young people and parents, and the lack of support, funding and engagement by government and industry. Consequently, recommendations about ways forward cannot be solely about changes to and reforms in VET, its institutions and workforce. There is also an important role played by industry and employers to engage with and support VET provisions and to champion the occupations they represent to attract young people to learn about and engage in them. However, each of these factors, as noted above, are interdependent. It is also necessary for decision-making by young people, parents and others in the community to be more informed and impartial.

As a way of redressing the low standing of VET, the delegates were asked to identify policies and practices that would, in their countries, likely assist in enhancing the standing of VET. A significant number of responses were submitted by delegates from a range of countries. The following sections are a collation and synthesised set of broad suggestions that essentially comprise a set of policy and practice recommendations for what government, communities, employers, VET institutions and global agencies such as UNESCO need to be doing. These suggestions are set out below and depicted in Fig. 4.1.

Government

Governments are encouraged to find ways of promoting VET by: (a) championing its standing and the occupations it serves; (b) legislating and mandating institutional arrangements (e.g. facilities for teaching and learning, training and certification of teachers) for VET to be a viable and worthwhile educational sector; (c) engaging with a wide array of stakeholders to inform, enact, participate in and evaluate VET policies and provisions; and (d) resourcing VET adequately so it can achieve the goals governments want and, in doing so, attract greater interest from young people, their parents and employers. For example, delegates noted that in the UAE, they are emphasising educational programmes with an applied learning focus, and also a 'professional' stream in schools, thereby emphasising the importance of practical and applicable learning outcomes. In Nigeria, the government is funding a specific institution to train technical teachers. In the Caribbean, the government has organised a specific qualification to ensure that every school student engages in VET.

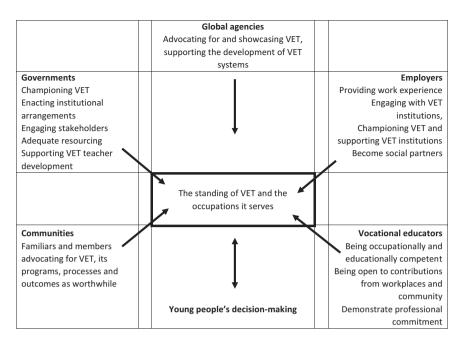


Fig. 4.1 Factors re-shaping the standing of vocational education

Communities

Communities should promote the standing of VET by: (a) embracing VET provisions and acting to ensure they are worthwhile and worthy of the communities' young people; (b) advocating for VET, its programmes, institutions, provisions, policies and outcomes; and (c) supporting VET in ways that deliver solid and worthwhile outcomes for communities, young people and local workplaces. For example, delegates reported that in Nigeria, communities celebrated Youth Skills Day and promoted the importance of skill development. In countries in Europe, community needs are often expressed through Chambers of Commerce that develop effective working relationships with local VET institutions; these arrangements are also evident in Algeria, Jordan and Morocco.

Employers

Employers should promote the processes and standing of VET by: (a) providing students with work experiences that support the development of their occupational skills to make them effective and employable; (b) engaging with VET institutions, local communities and other partners to promote the worthiness of occupations and importance of skills; and (c) advocating for the importance of the work they undertake to attract young people to that work and emphasise the value of the skills

development provided by VET. For example, where VET is viewed as effective and as having a strong standing it is often in countries where employers engage as social partners with VET. It is possible to look beyond Germany and Switzerland for where these partnerships work and are effective. For example, countries such as Algeria, Jordan, Morocco and Palestine have arrangements in which employers become social partners. This is often promoted and made possible by local Chambers of Commerce.

Vocational Educators

Educators should work to enhance the processes and standing of VET by: (a) being competent in their occupational and teaching capacities in ways that heighten the importance of VET and the occupations they teach and prepare students for; (b) being open to others' contributions, including those of students, community and workplaces and be willing to update their knowledge; and (c) engaging in teaching activities in ways that demonstrate their professional commitment, and promote VET's importance to their communities, workplaces, students and their parents. For example, contributors noted that in the Caribbean, the University of West Indies has established a programme for VET instructors. Also, it is suggested that in China, the VET provisions are increasingly focusing on the needs of the society and enterprises and, thereby, are becoming more relevant and attractive to young people.

Global Agencies

Global agencies such as UNESCO should promote the standing and processes of VET by: (a) advocating for and showcasing, sharing and distributing instances of effective practice to enhance the standing of VET; and (b) supporting countries, VET systems, teachers and communities and engaging effectively and positively with VET provisions. For example, it was noted by delegates that UNESCO is organising the World Youth Skills Day and using this as global event to encourage consideration of skill development for young people. The International Labour Office is supporting models of apprenticeship that meet the needs of students and are aligned with the resources and needs of countries' educational systems and workplaces.

Given the interdependence amongst all of these contributions, these suggested actions can have carriage as policies and practices to be undertaken by government, community, employers, educators and global agencies that will be helpful in guiding actions albeit in country-specific ways and as suggested and proposed by delegates from the countries represented in this virtual conference.

Evaluating the Impact of Those Policies and Practices

After such a detailed set of contributions about factors shaping the standing of VET, and what needs to happen to enhance its standing, it is perhaps not surprising that the responses about how to evaluate the impact of these policies and practices were largely those endorsing the previous contributions. That is, the comprehensive nature of the sets of responsibilities and posited outcomes were such that not a lot further was added in terms of new content. However, from a delegate from Kenya came some practical measures by which the impact of these policies and practices might be evaluated. These measures are as follows:

- Increased enrolment in VET institutions
- Higher employability index
- · Reduced skills gap
- High absorption rates (i.e., employment)
- · Reduced unemployment
- International/regional workshops/conferences
- · Financial support, and
- Regional (digital) forums/networks

These kinds of measures are, ultimately, the basis upon which the success of these policies and practices would be assessable in terms of government action, community engagement and perceptions of employers and young people about the worth of VET.

Enhancing the Status of Vocational Education

As noted, there was wide interest and strong engagement in improving the standing of VET in countries with developing as well as developed economies. This was the topic of discussion of the UNESCO-UNEVOC virtual conference which particularly sought to engage with and secure contributions by delegates from a wide range of countries, mostly with developing industrial economies. Clearly, the issue of the standing of VET and the occupations it serves attracts much attention and has motivated this wide engagement. The outcomes of the deliberations across the virtual conference are evident in the findings discussed above and emphasise a range of common factors that transcend national boundaries and even continental divides, not to mention the relative economic development of those countries. It becomes clear from the outcomes of this conference that, on their own, single interventions such as those taking place within VET institutions will be unsuccessful without broader engagement with national governments, the community, including employers. Global agencies, such as UNESCO, have a particular role to play in countries with developing economies to support these endeavours given that the social and institutional infrastructure than exists in those with developed economies are likely to be absent or immature. So, their roles likely include seeking to inform, and change the perspectives of young people and their parents. Committed and long-term government action is also likely to be required to achieve these outcomes. So, just as the problem of the relatively low standing of VET is a product of a complex of factors, it can only be addressed by a similar range of initiatives seeking to redress those problems.

Given that there are clearly differences in the standing of VET across countries, there are real possibilities for enhancing that standing, but there are also risks about further weakening it. Consequently, carefully organised and evidence-based approaches are required for elevating the standing of VET across all countries, but in specific ways that are most suited to the historical, institutional and cultural requirements of those countries.

References

- Baxter, J. (2017). Chapter 2: The career aspirations of young adolescent boys and girls. In *The longitudinal study of Australian children annual statistical report 2016*. AIFS.
- Billett, S. (2014). The standing of vocational education: Sources of its societal esteem and implications for its enactment. *Journal of Vocational Education and Training*, 66(1), 1–21.
- Billett, S., Choy, S., & Hodge, S. (2020). Enhancing the standing of vocational education and the occupations it serves: Australia. *Journal of Vocational Education & Training*, 72(2), 270–296.
- Bisson, R., & Stubley, W. (2019). After the ATAR: Understanding how Gen Z transition into further education and employment. Year13. https://youthsense.com.au/research. Accessed 15 Sept 2019
- Bowen, G., & Kidd, E. (2017). Career guidance: The missing link in school to work transitions. Youth Action.
- Brown, J. (2017). *In their words: Student choice in training markets Victorian examples*. NCVER. Cedefop. (2014). *Attractiveness of initial vocational education and training: Identifying what matters*. Publications Office of the European Union.
- Cedefop. (2017). European public opinion survey on vocational education and training (Cedefop research paper no. 62). Publications Office of the European Union. https://doi. org/10.2801/264585
- Cho, M. K., & Apple, M. (1998). Schooling, work and subjectivity. British Journal of Sociology of Education, 19(3), 269–291.
- Choy, S., Le, A. H., Billett, S., & Hodge, S. (2022). Chapter 17: Surveys of students, parents and teachers (phase 2). In S. Billett, B. E. Stalder, A. Vibe, S. Choy, S. Hodge, & A. H. Le (Eds.), *The standing of vocational education and the occupations it serves: Current concerns and strategies for enhancing that standing*. Springer.
- Clement, U. (2014). Improving the image of technical and vocational education and training. GIZ.Dalley-Trim, L., Alloway, N., & Walker, K. (2008). Secondary school students' perceptions of, and the factors influencing their decision-making in relation to, VET in schools. The Australian Educational Researcher, 35(2), 55–69.
- Deissinger, T. (2022). Chapter 5: The standing of dual apprenticeships in Germany: Institutional stability and current challenges. In S. Billett, B. E. Stalder, A. Vibe, S. Choy, S. Hodge, & A. H. Le (Eds.), *The standing of vocational education and the occupations it serves: Current concerns and strategies for enhancing that standing*. Springer Nature.
- Deissinger, T., & Ott, M. (2016). Tertiarisation of vocational education and training and its implications Problems and issues in Germany and France. In S. Bohlinger, T. K. A. Dang, &

M. Klatt (Eds.), *Education policy: Mapping the landscape of scope* (pp. 268–296). Peter Lang. https://doi.org/10.3726/978-3-653-05044-8

- El-Ashmawi, A. (2017). Reviewing work-based learning programs for young people: Republic of Egypt. UNESCO.
- Fuller, C., McCrum, E., & Macfadyen, T. (2014). Teachers' knowledge and experiences of information advice and guidance: Some implications for the current policy context in England. Education Inquiry, 5(22). https://doi.org/10.3402/edui.v5.23922
- Galliott, N. (2017). Online career guidance: Does knowledge equate to power for high school students? *Journal of Psychologists and Counsellors in Schools*, 27(2), 190–207.
- Gemici, S., Bednarz, A., Karmel, T., & Lim, P. (2014). The factors affecting the educational and occupational aspirations of young Australians. NCVER.
- Ghneim, O. (2017). Reviewing work-based learning programs for young people: Lebanon. UNESCO.
- Gore, J., Ellis, H., Fray, L., Smith, M., Lloyd, A., Berrigan, C., Lyell, A., Weaver, N., & Holmes, K. (2017). Choosing VET: Investigating the VET aspirations of school students. NCVER.
- Hodge, S., Billett, S., & Choy, S. (2022). Chapter 16: Influences on post-school decision-making: Perspectives of school students, parents, teachers (phase 1). In S. Billett, B. E. Stalder, A. Vibe, S. Choy, S. Hodge, & A. H. Le (Eds.), The standing of vocational education and the occupations it serves: Current concerns and strategies for enhancing that standing. Springer Nature.
- Jweiles, Z. (2017). Studies for reviewing work-based learning programs for young people: Palestine. UNESCO.
- Lamb, S., Maire, Q., Walstab, A., Newman, G., Doecke, E., & Davies, M. (2018). Improving participation and success in VET for disadvantaged learners (Research report). National Centre for Vocational Education Research (NCVER).
- Maxwell, G., Cooper, M., & Biggs, N. (2000). How people choose vocational education and training programs: Social, educational and personal influences on aspiration. NCVER.
- Parliament of Victoria: Economic, Education, Jobs and Skills Committee. (2018). *Inquiry into career advice activities in Victorian schools*. https://www.parliament.vic.gov.au/images/stories/committees/eejsc/Career_Advice_Activities/EEJSC_58-04_Text_WEB.pdf
- Rawashdeh, H. (2017). Work-based learning in Jordan. UNESCO.
- Schweri, J., Eymann, A., & Aepli, M. (2020). Horizontal mismatch and vocational education. Applied Economics, 1–15. https://doi.org/10.1080/00036846.2020.1713292
- Snowden, C., & Lewis, S. (2015). Mixed messages: Public communication about higher education and non-traditional students in Australia. *Higher Education*, 70(3), 585–599.
- Somers, M. A., Cabus, S. J., Groot, W., & van den Brink, H. M. (2019). Horizontal mismatch between employment and field of education: Evidence from a systematic literature review. *Journal of Economic Surveys*, 33(2), 567–603.
- Ulrich, A., Frey, A., & Ruppert, J. J. (2018). The role of parents in young people's career choices in Germany. *Psychology*, 9(08), 2194.
- UNESCO. (2018a). Work-based learning programs for young people in the Arab region. UNESCO. UNESCO. (2018b). Work-based learning programmes for young people in the Arab region: A comparative and longitudinal analysis A synthesis report. Retrieved from https://unevoc.unesco.org/pub/yem_regional_overview_work_based_learning.pdf
- UNESCO-UNEVOC. (2018). Short summary of the Virtual Conference on improving the image of TVET: Making TVET attractive to youth. https://vocationsandlearning.files.wordpress.com/2019/10/vc_synthesis_21_final.pdf
- Webb, S., Black, R., Morton, R., Plowright, S., & Roy, R. (2015). Geographical and place dimensions of post-school participation in education and work. NCVER.
- Wolf, A. (2016). Remaking tertiary education: Can we create a system that is fair and fit for purpose. Education Policy Institute.
- Wyman, N., McCrindle, M., Whatmore, S., Gedge, J., & Edwards, T. (2017). *Perceptions are not reality: Myths, realities & the critical role of vocational education & training in Australia*. Skilling Australia Foundation.

Chapter 5 The Standing of Dual Apprenticeships in Germany: Institutional Stability and Current Challenges



Thomas Deissinger

Abstract In Germany, while the dual system creepingly seems to lose attractiveness among school leaver, "academisation" in conjunction with "vocationalisation" mark an adaptation of the apprenticeship system to higher education – which may be called "tertiary vocational education" or "dual study programs". Besides the situation on the training market with its obvious ambivalences, this raises the question whether the dual system, which is widely renowned for its functionality and its firm role within the German economy, can defend its traditional rank as a supplier of skilled employees and with it its relevance for the socialisation of young people. Besides academisation, digitalisation and other modernisation issues certainly now have an impact on the VET system and its socio-economic acceptance and esteem.

The paper tries to sketch some of these current issues with respect to the cultural and economic standing of the dual system within German society by focusing, besides historical aspects, the specific kind of "subsidiarity" within the dual system that underlies the standing of apprenticeships in this country. By commenting on the importance of the influences from relevant policy developments we point out that it is not just the "duality" which characterises the German VET system but its typical kind of institutionalisation.

Keywords VET · Dual system · Germany · Apprenticeship · Craft regulation act · Chambers · Training companies · Subsidiarity · Vocational training act · Occupational training · Training regulations

T. Deissinger (⊠)

Introduction

Vocational Education and Training (VET) systems, above all apprenticeships, are cultural constructions as they have their roots in historical developments which differ fundamentally between nations. Societies therefore cannot ignore the "historical character" of their respective VET systems. This also means that esteem of VET in general, as well as the specific significance and esteem given to apprenticeship, as a specific institutional and didactical setting for the problem of skill formation, in particular can differ in many ways in the various national settings. The interaction or interdependence between the apprenticeship system and the systems of general and higher education respectively play a major role when it comes to describing the context and the ways by which the apprenticeship system is defined and perceived by looking at its standing in society. In Germany, the understanding of the so-called "dual system" as a separate vocational pathway and "unique" as well as valuable in itself, is a trait which sets the country apart from most other European societies (with the exception of Austria and Switzerland). This positioning has traditionally been exposed to criticism with respect to its system character since dual apprenticeships belong both to the educational and the economic sphere. This also means that academic and (non-academic) vocational pathways, in the German case, are disjunct though interdependent subsystems – with their mutual interaction impacting the "vocational track" in a stronger way than in other countries. At the same time, the "dual system" – seen as a (problematic) blueprint for reforming VET in quite a number of countries (Euler, 2013) – is not free of system instabilities and failures. Two problem areas strike the eye: One is academisation which, among other implications, is now leading to fewer applicants for apprenticeships; the other is the dependency of the dual system from a functioning training market.

The following reflections refer to the standing of apprenticeships in the case of Germany with a special focus on why the dual system is comparatively well accepted among companies and the institutional setting in which it works. Hereby we cannot ignore the obviously unique meaning and understanding of the "vocational principle" (Berufsprinzip) and the notion of "competence" in German-speaking countries, which contrasts with, e.g., Anglophone societies such as the UK, Canada or Australia, where the "work-based route", including apprenticeships, suffers from low esteem, low participation, and quality problems, compared to the academic pathway (see, e.g., Ryan & Unwin, 2001). The core issue in the German case seems to be how the value which society associates with apprenticeships, i.e., the traditional "normal" pathway for the majority of the school-leaving population, can be maintained against the challenges the dual system is currently facing. We will try to outline that it is not (only) the dual character as such, which seems to be the relevant explanatory variable for the success story behind the dual system, but rather its typical kind of institutionalisation which grounds in a particular course of historical development and cultural influences and helps us to understand what "standing of VET" in the German context means.

Features of the Dual System

Non-academic VET still is a kind of "normal" pathway for the majority of school leavers in Germany. According to the latest Vocational Training Report (BIBB, 2021), in 2019, roughly one million people entered one of the three sectors of the VET system, i.e., the dual system, the school-based VET system (including the health and care sector), and the so-called "transition system", while 513,082 young people embarked on studies in higher education. 483,714 started an apprenticeship in the dual system, which is lower than in the previous years since 2005. The percentage of school leavers with a lower or intermediate school certificate entering the VET system (school-based or dual) amounts to roughly 70%. The relevance of VET becomes even more ostensible if we take into account the number of apprenticeship beginners with a higher education entrance qualification who currently comprise nearly 30% of new trainees in the dual system. The total number of apprentices in Germany (31 December 2019) now stands at 1,328,964 young people (BIBB, 2021, pp. 81f., 92, 164f.). Figure 5.1 depicts how the dual system is connected with the general education system, the higher education system and how it is located within the VET system in general (dotted lines indicate non-conventional pathways):

Against this background, the notorious perception of external observers seems plausible that Germany still is a country where "firms are distinguished by a very

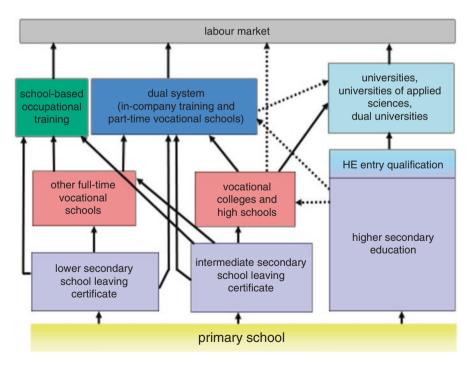


Fig. 5.1 Educational positioning of the German dual system

high proportion of the workforce having intermediate level qualifications" (Steedman, 1998, p. 81; Marsden & Ryan, 1995). The reason for this is that formalised initial vocational training in the crafts, in industry and the service economy still predominantly occurs in the apprenticeship system (Greinert, 1994), giving young people formal access to the labour market as skilled workers, craftsmen or clerks (Bynner & Roberts, 1991). Initial training of school leavers happens in a range of "recognised training occupations" (Deissinger, 2009, 2010) which also cover major areas of the services sector normally associated either with a degree-based educational background or low-level jobs that do not require systematic training. Although the dualism of "learning sites" and legal responsibilities certainly is the most visible characteristic of this "German system" of vocational training (Greinert, 1994), its working principles are characterised by three more features (Deissinger, 2010; Kell, 2020):

- Firstly, apprenticeships are traditional pathways into employment that basically follow the ancient model of skill formation under the auspices of companies and guilds/chambers (Deissinger, 1994; Deissinger & Gonon, 2021; Deissinger, 2021; Zabeck, 2013, pp. 52ff.). This means that work experience and on-the-job competences during the training period are seen as particularly relevant for the acquisition of occupational competences. At the same time, the skill requirements laid down in the training regulations (*Ausbildungsordnungen*) are defined "around the workplace", since they are based on national standards of occupational competence that cover the whole range of an occupation, not just specific workplaces (Harney, 1985).
- Secondly, the dual system is determined by the involvement of the state with regard to the nature and quality of occupational standards as well as to legal conditions underlying apprenticeship training (Raggatt, 1988; Deissinger, 1996). The German "training culture" (Brown & Evans, 1994) builds up on the notion that an apprenticeship should be based on an understanding which sets it apart from "normal work". The dual principle with the vocational school as the partner of the company stands for this understanding although educational objectives also underlie the training regulations for companies.
- Thirdly, public, private and semi-private institutions work together in the dual system by using long-established modes of cooperation and coordination. Employers and unions normally take the initiative with respect to training regulations and their revision or modernisation (Streeck et al., 1987; Le Mouillour, 2021). Besides, the chambers are defined as the "competent bodies" according to the Vocational Training Act (Deissinger, 1996) for organising and assessing incompany training.

Against this background, the German meaning and understanding of the vocational principle as realised in the dual apprenticeship system points to a specific quality of didactical as well as institutional arrangements which define the "application requirements" for skilled labour (Kutscha, 1992, p. 537):

- Occupations are seen as "more or less complex combinations of special achievements" which relate to formal qualifications typical of a given trade. Therefore, they have been created in order to correspond with the functional requirements of the division of labour. Each occupation has to be integrally structured and relatively job-independent. Both the branch and the individual value of the qualification obtained at the end of the training process represent "special qualities" both in relation to other occupations and to qualifications in higher education (Beck et al., 1980, pp. 20ff.).
- Training occupations function as the starting point as well as the target of the training process and are based on what may be called an "organisational picture" (Brater, 1981, p. 32) which is formally standardised by the government and thus both interwoven with and removed from the specific character of individual workplaces. The quantity and quality of skills and knowledge to be created in the training process are supervised and validated through intermediate and final examinations as well as certified in a way acceptable to the labour market. Apprenticeships hence are closely associated with the notion of homogeneous training courses based on standardised training regulations and their "exclusive" character (see Art. 4 of the Vocational Training Act; Federal Ministry of Education and Research, 2005, p. 5).

Initial training in a recognized training occupation may only be provided on the basis of the initial training regulationsTraining regulations.spiepr Par12

The majority of training schemes (324 in 2020) are so-called "mono occupations" which do not allow for any kind of specialisation, let alone a differentiation of training time or training contents. It is assumed that a broad basis of elementary vocational qualifications supports a maximum of flexibility and mobility between different workplaces and firms. Specialisation only takes place after an initial training period of normally one year which is common to a whole range of occupations related with each other in a given "occupational field". The current policy of modernisation, however, goes further and tries to dynamically integrate new developments in the economy – in particular IT competences and digitalisation trends – into the existing system of vocational training. The year 2020 saw the respective revision of 11 training occupations (BIBB, 2021, p. 64).

On the institutional level, quite in line with what in Germany stands for the term "social market economy", apprenticeships are determined by shared responsibilities which are typical of so-called "coordinated market economies" (Busemeyer & Trampusch, 2019, pp. 149ff.). Their rooting in such a socio-economic environment is only fully understandable when we turn our eye to the historical-cultural foundations of VET, which explain the comparatively high esteem that is still given to apprenticeships in the German case. The general esteem for the apprenticeship system derives from this institutional framework in which "shared responsibilities" also mean "subsidiarity" of the relevant stakeholders (companies, chambers) in relation to the state. In a similar way, the vocational part-time schools also represent a more or less decentralised approach as they are subject to federal state regulation (education ministries of the *Länder*, school laws, occupation-specific curricula). We

will discuss the "subsidiarity principle" with respect to vocational training in companies in more detail in Sect. 4 of this paper, including its historical foundations.

Challenges Affecting the Esteem for the Apprenticeship System in Germany

Four problem areas may be identified when looking at the role and standing of VET in general and the dual system in particular:

The most relevant one certainly is the training market and employer commitment in the apprenticeship system. On the one hand, this problem field is associated with the opportunities young people have in the different sections of the training market. On the other hand, companies now also face difficulties when it comes to recruiting young apprentices for certain occupational fields. This mainly affects the craft sector (being the most traditional sector within the dual system), which in 2020 recorded 18,600 apprenticeship vacancies (BIBB, 2021, p. 21). One reason, besides academisation, seems to be the low esteem of some craft occupations (Thomä, 2014, p. 593). The paradox of a simultaneous recruitment and provision problem has become more visible in recent years (Seeber et al., 2019, p. 72; BIBB, 2021, pp. 156ff.). Also, companies, even in the branches where there is a lack of applicants for an apprenticeship, have become more exacting with regard to the abilities and aptitude of young people. There is certainly a grain of truth in the observation that the decreasing number of "ordinary" school leavers (i.e., after grade 9 or 10) has exacerbated this problem in branches which seem highly dependent on this category of young people (BMBF, 2021, p. 68). Another catalyst for imbalances in the training market is demographic change. There is no doubt that the retirement of the "baby boomers" in the next ten years will affect the situation for small companies and mainly traditional occupationals fields, such as bakery, cooking, butchers, plumbers. All of this seems astonishing when we look at the so-called "supply-demand ratio" (ANR), which overall sits above 100, though with huge differences in regions and branches (BIBB, 2021, pp. 156ff.; BMBF, 2021, p. 55). Although this ratio has been rising recently, the number of young people failing with their applications has decreased only marginally which means that more supply does not necessarily lead to more training contracts (Seeber et al., 2019, pp. 68–72). In general, the matching problems in the training market have become more severe, and there is a negative correlation between the number of lower secondary school leavers in a given occupation and the demand among school leavers and the willingness to take up an apprenticeship in this field (BIBB, 2021, p. 83). The gravity of the problem for the craft sector is underlined by the fact that the share of apprentices with a lower secondary school qualification in this sector dropped from 53% in 2007 to 37.3% in 2019 (ibid., p. 125). Also, occupations yielding better incomes (mostly in the machine, car and chemical industry and in some modern service occupations) are normally more attractive, even for school leavers holding an *Abitur*, i.e., the higher secondary school leaving certificate (Seeber et al., 2019, p. 83). In the latest Vocational Training Report (BIBB, 2021) the mismatch is described as being composed of three dimensions (p. 157): regional, occupational, person-related. For example, there are 35% of the labour office districts reporting an ANR above 100 while the majority of regions, not only in the East of Germany, have an under-supply of training places. Occupational mismatch refers to the fact that occupations are seen as more or less attractive in the eyes of young people, whereas person-related reasons are associated with high expectations of employers when recruiting school leavers for an apprenticeship or unsatisfactory grades of applicants.

- The so-called "transition system" (Autorengruppe Bildungsberichterstattung, 2020, p. 152; BIBB, 2021, pp. 152ff.) certainly is one of the results of persistent partial market failure in the dual system, which has always been dependent on a well-working economy creating jobs. The positive view of the dual system as the "normal path" for school leavers from lower and intermediate secondary schools becomes questionable when we look at some figures: Most school leavers entering one of the "measures" of the transition system now have graduated from lower secondary schools (43.2% in 2019). They now belong, together with youth with a migration background, to the most disadvantaged groups in the training market, as their share among apprenticeship beginners has dropped to 20.9% (ibid., pp. 87, 167 f.). However, numbers entering the transition system no longer seem to be as high as in the late 1990s and early 2000s. The Vocational Training Report discloses that this sector has been shrinking since 2016 and now comprises 249,537 young people in vocational preparation or orientation programmes (ibid., p. 81).
- It is obvious that the above-mentioned decline of "normal" school leavers entering the dual system is not only due to demographic factors but also to the fact that more young people aspire to get higher school certificates which gives them the double option to progress to higher education and to embark on an apprenticeship in one of the more attractive training occupations (e.g., banking clerk or IT). Academic drift and meritocracy have become stronger since the 1990s and now have an impact on the supply of skilled employees in quite a number of branches of the German economy (Wolter & Kerst, 2015). The global academic drift towards upper secondary education (which also means reducing selection after primary school in the last years) has a lot to do with the educational aspirations of parents, as they are manifestations of what sociological research has called "meritocratic logic" (Goldthorpe, 1996). According to this principle, the main function of certificates, qualifications, and underlying educational pathways does not consist in the benefit of the contents and the functional relevance of the respective qualification for the labour market, but rather refers to its formalised result. One of the implications or, more precisely, causes of this belief in the alleged superior value of higher education achievements as such seems to point to a creeping loss of appreciation of VET in society, although this is not without a certain ambivalence: The percentage of school leavers from general and

90 T. Deissinger

vocational education with a higher education entrance qualification (*Abitur* or *Fachhochschulreife*) now stands at 51%. At the same time, apprentices with this qualification made up for nearly 30% of new training contracts in the dual system in 2019 – which seems to be a German specificum, even in comparison with Austria or Switzerland. Not everybody having an *Abitur* actually proceeds to university (BIBB, 2021, p. 119; Autorengruppe Bildungsberichterstattung, 2020, p. 143).

• Finally, modernisation issues have emerged in a now more visible way than in former decades. This means that training contents need to be up-dated regularly, including the creation or structural revision of already existing training schemes (Euler, 2021). Another modernisation topic certainly is digitalisation and digital learning environments. Whereas in the first field of action the system seems to adapt, though not always fast enough, to new work requirements, technologies in firms, and the expectations of companies regarding the social competences of their trainees, etc., the second one is not less than a big building site (Euler & Wilbers, 2020). It was the pandemic that unveiled that Germany was not in line with other countries when it comes to modernising its infrastructure, as well as schools and other educational institutions in this respect.

The first three challenges have got to do with external factors, especially the education system, the training market, the economic situation and the specifities of local conditions under which companies work, as well as academic drift which now also affects Germany. The last one certainly is less serious as modernisation takes place regularly and has created modern occupations in both traditional fields, such as the metal trades, and in the services economy.

Nevertheless, it needs to be added that there is quite a lot of ambivalence whether all these problem aspects have to be considered as fundamental problems: The inherent "weaknesses" that we have mentioned may also be seen as "strengths" of the apprenticeship system as such. It is true that the training market stands for partial failures and also for the general (sometimes insufficiently realised) responsibility given to companies in the system. Yet the "system reference" of the apprenticeship system clearly is different from all other sub-systems within the German education system as it is a matter of self-government in the first place, and it is not least the labour market functionality in many branches of the economy that explains its esteem among companies, school leavers, and, above all, politicians.

On the other hand, the obvious trend in the education system towards higher secondary education and universities exerts a more or less direct impact on subsequent educational streams leading away from VET. Interestingly, the insight that educational expansion and the underlying meritocratic aspirations are bound to affect VET was already discussed in the late 1950s (Herrlitz et al., 1986, p. 155). In these days, however, we are challenged to look at this phenomenon in a more differentiated way. Academisation or academic drift in the German context must not only be seen as jeapardising the apprenticeship system. Four types of academisation can be distinguished (Deissinger, 2015):

- The first one refers to secondary education where VET in a functional sense offers the same certificates as those in higher secondary schools (Deissinger, 2019). This mainly applies to higher vocational schools such as the *Berufskolleg* (vocational college) or the *Wirtschaftsgymnasium* (commercial high school). These types of schools also have a functional link with the dual system since higher education entrance qualifications in Germany (obtainable in general or in vocational education) are often used to get "admission" to high-level apprenticeship placements, e.g., in banking, insurance or other commercial occupations where companies have become very selective and demanding. It may be claimed, therefore, that this manifestation of "generalisation" within the VET system does not necessarily have the potential to jeopardise the dual system.
- Secondly, in Germany there are only few schools or courses offering "combinations of accredited general (academic) and vocational learning and attainment that formally qualify for entrance to higher education and the labour market" (Deissinger et al., 2013, p. 8). These "hybrid qualifications" also function as a tool leading to a kind of generalisation of vocational education. In the federal state of Baden-Württemberg in particular, the above-mentioned vocational college fails to produce labour-market relevant qualifications besides higher education entitlements against an "over-mighty" dual system (Deissinger, 2007). Since hybridity is normally not linked to vocational training (like in Switzerland) it undoubtedly has a stabilising impact on the apprenticeship system whose standing does not allow alternative pathways into occupational labour markets in the VET school system (for Switzerland see Gonon, 2013).
- As a third type we can point to dualisation and vocationalisation within higher education, which has become one of the most recent features of an increasingly differentiated higher education system in Germany. The so-called *Berufsakademien* (vocational academies which combine academic and practical training) or "dual universities" (*Duale Hochschulen*) respectively (Deissinger, 2005; Deissinger & Ott, 2016) are meant to make academic courses more attractive for companies and here, like in the dual system, the participation of employers in the process of skill delivery is required. Dual courses or institutions in the tertiary sector represent a new kind of structural expansion of the higher educational system as they copy the vocational principle and the alternating learning mode of the dual system (Euler, 2014, pp. 322–327).
- The fourth type recurs to the Bologna Process coming up with the introduction of newly structured and staged study programmes. Most German universities and faculties (except for medicine, law and theology) have meanwhile introduced Bachelor and Master programmes and qualifications that also partly contain vocational specifications (Euler, 2014, p. 322). The Bologna Process certainly may have more endangering implications or consequences for the dual system: It could, in the long run and in particular labour markets at least, speed up the replacement of graduates from the dual system with university (of applied sciences) graduates (Deissinger & Ott, 2016, p. 275).

It needs to be added that these tendencies are culture-specific and nation-specific and have to be seen in the context of their respective political environment. It also seems that the German situation is unique in terms of the role VET plays in the process of academisation (by attracting young people with grammar school qualifications into the apprenticeship system, and by functionalising enabling vocational (full-time) schools to contribute to the number of school leavers eligible to pass on to higher education). These peculiarities, which one would not find in Austria or Switzerland, also correspond with the uniqueness of the German apprenticeship system, its strong rooting in the economic system, and its special status within the education system.

Subsidiarity in VET as an Explanatory Factor for the Persistent Value Given to Apprenticeships in Germany

The Logic Behind the "Subsidiarity Principle" and its Institutional Realisation in the German VET System

In the English-speaking VET research community, the German dual system has traditionally received major attention on account of its structural specificity, its traditional working principles, and, above all, because it seems to solve the problem of integrating young people into the labour market relatively smoothly (Prais, 1981; Raggatt, 1988). In contrast to the "fragmented" architecture of the English VET system (Keep, 2015) and its disregard of substantial pedagogical underpinning of workplace learning, which seems to be particularly notorious in the apprenticeship system (Unwin, 2019; Hordern, 2021), the German system seems to avail of working principles that pay tribute to both private and public interests, including shared responsibilities. Raggatt calls it "the most comprehensive and detailed regulatory system for apprenticeship training in the Western world" (Raggatt, 1988, p. 175) although subsidiarity, not central regulation, plays a major role in what political science labels "collective skill formation" (Busemeyer & Trampusch, 2019; Busemeyer & Schlicht-Schmälzle, 2014).

Subsidiarity becomes visible through the direct involvement of employers as the major providers of training. Once a training contract has been signed, the principal financial responsibility for the training process, which includes training allowances, lies with the companies. The fact that the company part of the dual system is financed mainly by employers reflects the principle of self-government re-affirmed by law as early as in the late nineteenth century. As overarching public institutions, the chambers execute important functions, such as examinations and the supervision of training companies, which in many countries are carried out by the state. The term "collective skill formation" refers to what may also be called a "public private partnership" which historically facilitated the formation period of the dual system in the late nineteenth century. Today, the public sphere in the dual system comprises

the chamber system, but also the trade unions and employer organisations as crucial stakeholders in the dual system (Streeck et al., 1987; Deissinger, 2010).

According to politial scientists, the "collective skill formation system" helped to avoid poaching in the German VET context and contributed to employers relying "on non-market forms of coordination through the chambers and strong employers' organisations" which disburdened companies and made strong investments in skill formation the normal case (Busemeyer & Schlicht-Schmälzle, 2014, p. 64). Both areas in which the public stakeholder groups (the social partners and the chambers) contribute to the functionality of the dual system (i.e., by defining the contents of training regulations and organising the assessment of apprentices) are subject to the principle of subsidiarity and hence a medium-strong commitment and regulation on the side of the state.

Subsidiarity in a legalistic sense can be found both in European Union law and in the system of self-administration typical for Germany's social-market economy. Besides the public TV stations and the public health insurance system, the chamber organisation is one of the significant manifestations of this governing principle. The EU Treaty 1992 (Maastricht) proclaims this principle (see Art. 3b; Council of the European Communities, 1992) as follows:

In areas which do not fall within its exclusive competence, the Community shall take action, in accordance with the principle of subsidiarity, only if and in so far as the objectives of the proposed action cannot be sufficiently achieved by the Member States (...).

The German chamber laws sound very similar by delegating power but also responsibility to public instead to state institutions (Zabeck, 1975). In the Craft Chamber Act (1953) and in the Act regulating the Chambers of Industry and Trade (1956), the specification of these powers is directly associated with vocational training. Art. 1 of the 1956 law states two main areas and thus the subsidiarity principle for the apprenticeship system, i.e., "promotion of trade and industry" and "organisation of VET" (Frentzel et al., 1972). In reality, the tasks of chambers stretch beyond these two areas as they encompass a range of both duties and voluntary tasks, such as offering consulting to companies and apprentices, training activities (e.g., master craftsman or worker courses, training the trainers etc.), or – most importantly – examinations. The basic principle lies in the assumption that local and regional bodies can exert these tasks more professionally than state institutions and that they do this out of self-interest, including the important field of examining apprentices. Therefore, they are named "competent bodies" in the rhetoric of the Vocational Training Act (see Art. 71 VTA; Federal Ministry of Education and Research, 2005, p. 17):

The chamber of crafts and trades shall be the competent body for the purposes of this Act in matters relating to vocational training in the occupations of the crafts and trades.

The resemblance with the ancient guild system becomes evident here, but also in the fact that training contracts are registered with the respective chambers according to the branch or occupation where the training takes place. Companies are members of the chambers on a mandatory basis and they have to pay for this membership. The

roof organisations of the chambers are also stakeholders of employers' interests. The subsidiarity principle leads to a more formal role of the government when it comes to vocational training in companies, which becomes visible in the composition of examination boards for the various occupations: Here, the consensus principle in conjunction with subsidiarity means that the trade unions and employer representatives are on an equal footing while just one vocational teacher (representing the dual partner) needs to be a member of the board in advisory capacity (see Art. 40 VTA; Federal Ministry of Education and Research, 2005, p. 12). Despite this imbalance between the two learning sites (school and company), the "joint governance of the apprenticeship system", including the state, employer and employee organisations as well as the chambers in particular, stand for an accepted and reliable framework (Le Mouillour, 2021, p. 131).

Historical Roots of the Subsidiarity Principle in the Field of Vocational Training in Germany

Both the dual principle and occupational orientation, but in particular the subsidiarity principle are connected with a unique historical development, which corresponds with the *Sonderweg* (specific track) of German history in the (late) nineteenth century. Late nation-building meant that the state took responsibility for social and economic policy and educational policy in a way which distinquishes the German history of VET from, e.g., the UK. Both the "invention" of the part-time continuation school, and the chamber system as a manifestation of "self-government" under the auspices of the state, roughly recur to the period between 1880 and 1920 (Greinert, 2006). The institutionalisation of the dual system in that period is still visible today – especially when we look at the corresponding, partly nearly identical crucial stipulations between the Vocational Training Act and the trade laws of the late nineteenth century (Deissinger, 1996, 2021).

At the end of the nineteenth century, one of the most significant cultural manifestations of German social history may be seen in the "rebirth" of the ancient apprenticeship model in the craft sector which became the reference point for a traditional notion of vocational training in small workshops, however now increasingly complemented by schooling, while industry only began to stick to this formal pattern of skill formation for company-based training after the turn of the century. In the late nineteenth century, the German Empire (1870/71–1919), on its way to become an economic and military power in Europe (Stürmer, 2002), supported trade and industry by dedicating all political energy to the end of material prosperity (Veblen, 1954, pp. 174–176).

Due to its Prussian tradition and its federalistic political heritage, the formation of the country as a national state developed differently from other European societies. The nation-specific "mindset" of the Bismarck era included a strong state and the political endeavour to guarantee "social peace" – which implied to resist a

purely capitalist extension of economic liberty (Görtemaker, 1989, pp. 293ff). Yet, after the turn of the century, the intention of industrial employers, mainly from the machine and electrical industry, was more apparently the idea of systematised training schemes than sticking to vocational traditions (Schütte, 1992, pp. 79ff.). Nevertheless, both strands merged into what is typical of in-company training in the dual system up to the present day. From the mid-1920s, the newly established chambers of industry and commerce also embarked on holding examinations for industrial workers, which until then had been the exclusive right of the craft chambers (Muth, 1985).

The "German different path" was therefore based on the notion of *Ordnungsstaat* (state of order) which meant binding major social groups, above all the so-called *Mittelstand* (trade-based middle class), to the state and its institutions. The *Mittelstandsbewegung* (small-business movement) emerged as an influential pressure group, with National Conservatives, the Catholic Centre Party and parts of the National Liberal Party urging for a course of conservative legal amendments in favour of small- and medium-sized businesses (Winkler, 1976, pp. 1–3). With respect to industrial legislation, their aspirations were anti-liberal, anti-capitalist, anti-socialist as well as protectionist (Nipperdey, 1990, pp. 258f.). The trade legislation which took place between 1881 and 1897 was meant to revise the liberalist trade law (*Gewerbeordnung*) passed in 1869/1871 (Schlüter & Stratmann, 1985, pp. 145ff.). Winkler describes this important phase of German economic history as follows (Winkler, 1976, p. 2):

In 1881, craftsmen achieved the legal recognition of their guilds, which, by the same law, also received certain privileges in the training of apprentices. In 1884, another law provided, in certain circumstances, the restriction to guild members of the right to have apprentices. By far the most important imperial handicraft law was that of 1897, which introduced handicraft chambers as institutions of public law and the so-called compulsory guild option (fakultative Zwangsinnung). This meant that membership in a guild became obligatory if the majority of the independent craftsmen of a given branch in a given chamber district so decided.

The logic behind these trade acts was that for the state it was crucial to grant economic privileges in return for the political value of the small-business sector to the state (Blackbourn, 1977, p. 421). The 1897 Act has become known as the *Handwerkerschutzgesetz* (Craft Protection Act) which should help to "defend" the independent artisan against social and economic turmoil (Zabeck, 2013, p. 427; Schlüter & Stratmann, 1985, pp. 210ff.; Deissinger, 2021). However, besides this socio-political motivation, a major argument of its protagonists was to maintain the quality of craft-based work by re-introducing *Befähigungsnachweise* (certificates of skill achievement) for the legal pursuit of a handicraft trade and for the taking of apprentices. Although it did not yet prescribe the *Meisterbrief* (master's certificate) for establishing a business – this happened only in 1935 – it led to a renaissance of basic apprenticeship regulations stemming from the ancient guild system.

The Act provided for craft chambers (*Handwerkskammern*) as institutions of public law and for the so-called compulsory guild option (*fakultative Zwangsinnung*). Membership in a guild became mandatory once the majority of craftsmen of a

branch in a given local community decided to establish such an institution. The regional craft chambers as well as the local guilds were installed as major agents of training. One of the crucial "innovations" were the newly established chambers which could organise examinations for journeymen and master craftsmen. The right to train apprentices now depended on a formal apprenticeship qualification and a minimum age of 24 years (which is the predecessor of the modern trainer qualification based on the 1969 VTA). Also, indentures of apprenticeships became general practice in the craft sector as well as the three-year training period (which is still the norm today in most occupations in the dual system).

Though not immediately and universally, the Craft Protection Act can be seen a strong catalyst for laying the foundations of the corporatist framework typical of the dual system up to the present day, which Zabeck calls "rationalisation in the context of a new corporatism" (Zabeck, 2013, pp. 424ff.). Even though they were not made mandatory, above all formal trade examinations in the craft sector certainly received a kind of substantial valorisation. Therefore, it is not exaggerated to argue that "in the book on the history of vocational training in the craft sector", the Act of 1897 launched a very relevant chapter (ibid., p. 430). Around the same time, at the end of the nineteenth century, it was compulsory attendance of the part-time continuation school (later called "vocational school" or "Berufsschule") that gradually emerged as the second pillar of the dual system. These schools had been made obligatory as early as 1869 when the trade law provided for compulsion but had left it to individual communities to pass by-laws for this purpose. Besides, there were the school laws of the German states which contained divergent regulations concerning continuing education. Although the Craft Protection Act also demanded that the apprentice had to be released from work to attend a continuation school and that his master had to ensure he did so, the character of the German continuation school system remained rather heterogeneous, first of all because of attendance regulations diverging regionally (Schütte, 1992). Furthermore, its curriculum could hardly be described as paying attention to the occupations of those who went there. As a matter of fact, most continuation schools were concerned with elementary education rather than the teaching of vocational skills (Blankertz, 1982, p. 205). This began to change with Kerschensteiner's continuation school policy which made him the "father of the vocational school" (Winch, 2006).

As already mentioned, the early decades of the twentieth century saw the emergence of a more or less universal system of company-based training with a systematic approach to secure the quality of skilled work by training contents and standards written down for the growing family of skilled occupations. These were now distinguished from semi-skilled and unskilled trades. By 1937, some 100 trade regulations with corresponding chamber examination requirements had been created (Benner, 1987, pp. 273ff.). The fact that the *Meister* qualification was also adopted by industrial companies underlines that economic motives, cultural traditions and a more or less pedagogical understanding of the training process based on didactical frameworks building up on the concept of the skilled craftsman amalgamated into a system rationale which guides companies, chambers, trade unions and employer organisations with respect to the apprenticeship system up to the present day. Thelen

points out that in Germany "state policy in the early industrial period was crucial to establishing the trajectory that skill formation (...) would take" (Thelen, 2008, p. 92). Another plausible argument reads that the role of Germany as a "late industrialiser" nourished the need to define quality standards for products and skill formation of workers alike which also stabilised the dual system (Streeck, 1991). The above-mentioned Vocational Training Act was the last cornerstone of a long-term quest for a quality-minded system of in-company training materialising in the shape of training occupations. The fact that it was only in 1969 that the apprenticeship system was given a legal grounding is quite astonishing, in particular when we look at the continuity of the dual system's development and its withstanding the turmoils of two World Wars.

Conclusion

In a recent CEDEFOP working paper, one of the authors points out that understanding apprenticeships in Germany means "to look at it from the perspective of companies, since they are the major actor in the system" (Le Mouillour, 2021, p. 137). The non-dominant role of the state, making "shared practices" in the public sphere possible – with chambers, employers and trade unions as stakeholders, as well as mandatory part-time course attendance in the vocational school and, above all, the concept of "skilled occupations", underline that the German dual system represents an "institution-based approach" in VET (Young, 2003). The contrast to apprenticeships in the UK, in particular in England, is striking when it comes both to the social positioning of apprenticeships within the country's education system and also with respect to "process regulation". Unwin deplores the notorious "lack of demand for skills by UK employers" pointing out that there are too many of them who "exist in the low-skill, low product specification end of the economy and so have little need for skills above basic operative level" (Unwin, 2003, p. 9).

From a pedagogical perspective, the historical cases of Germany, and also Switzerland (Deissinger & Gonon, 2021), make clear that *Bildung* and *Beruf* were and still are conceived as congruent, not rivalling concepts because they amalgamate practically in the concept of "skilled occupations" which underlines the pedagogical legitimation of VET up to the present day. These categories cannot be separated from social and economic developments, since they interact with them, although they represent a cultural sphere of their own (Weber, 1969, p. 11). Besides, they stand for the conviction that vocational training should be more than just a functional kind of skill formation or the isolated acquisition of competences – an issue which has been discussed in the critical discourse on competences and outcomes and the negligence of "knowledge" in VET in Anglosaxon countries. There is no doubt that the pedagogical and didactical quality of VET remains a decisive factor for the standing and status of VET, in particular apprenticeships in their positioning against higher education (see e.g., Wheelahan 2016, Billett/Choy/Hodge, 2020; Unwin, 2019; Hordern, 2021). The traditions shaping the VET system in

98 T. Deissinger

Germany still seem to be something that works in accordance both with the needs of companies as well as young people's aspirations to find their place in society. Raggatt (1988, p. 176) – speaking again of England – points to what the different histories of VET in the two countries reveal, i.e., the dependency of VET from the respective social and economic framework in which it has been operating so far:

Hence where the role, responsibilities and obligations of the participants including structures for cooperation in the dual system are set out in law there is very little comparable legislation in England. The law, then functions as a primary source of quality control in Germany. The system established in law provides continuity with the past building on established models and traditions.

Nevertheless, problems remain, in particular with respect to imbalances on the training market, selectivity from employers, too many school leavers with weak competences, and academic drift. Although there is no real danger in Germany today that "vocational education and training [might move] into the college classroom" (Payne, 1999, p. 497), academisation is on the agenda and one of the suspense-packed questions certainly remains the issue of a long-term "survivability" of apprenticeships in a modern "learning society". On the other hand, academisation tendencies in Germany have to be seen in a specific light. They have to be mirrored against the context of Germany's strong vocational tradition, both in the context of social and educational history as well as in educational theory (Winch, 2006). Even more important seems to be that there is not only a pedagogical impetus regarding the logic underlying the apprenticeship system, but a strong commitment across relevant groups in society and the economy to strengthen the system and make it fit for the future.

References

- Autorengruppe Bildungsberichterstattung. (2020). Bildung in Deutschland 2020. Ein indikatorengestützter Bericht mit einer Analyse zu Bildung in einer digitalisierten Welt. W. Bertelsmann.
- Beck, U., Brater, M., & Daheim, H. (1980). Soziologie der Arbeit und der Berufe. Grundlagen, Problemfelder, Forschungsergebnisse. Rowohlt.
- Benner, H. (1987). Arbeiten zur Ordnung der Berufsausbildung vom DATSCH bis zum BiBB. In W.-D. Greinert et al. (Eds.), Berufsausbildung und Industrie. Zur Herausbildung industrietypischer Lehrlingsausbildung (pp. 269–293). Berlin.
- Billett, S., Choy, S., & Hodge, S. (2020). Enhancing the standing of vocational education and the occupations it serves: Australia. *Journal of Vocational Education and Training*, 72(2), 270–296.
- Blackbourn, D. (1977). The Mittelstand in German society and politics, 1871-1914. *Social History*, 4, 409–433.
- Blankertz, H. (1982). Geschichte der Pädagogik. Von der Aufklärung bis zur Gegenwart. Büchse der Pandora.
- Brater, M. (1981). Thesen zur Berufskonstruktion. Berufsbildung in Wissenschaft und Praxis, 10(5), 32–36.
- Brown, A., & Evans, K. (1994). Changing the training culture: Lessons from Anglo-German comparisons of vocational education and training. *British Journal of Education and Work*, 7(2), 5–15.

- Bundesinstitut für Berufsbildung. (2021). Datenreport zum Berufsbildungsbericht 2021. Informationen und Analysen zur Entwicklung der beruflichen Bildung. BIBB.
- Bundesministerium für Bildung und Forschung. (2021). Berufsbildungsbericht 2021. BMBF.
- Busemeyer, M. R., & Schlicht-Schmälzle, R. (2014). Partisan power, economic coordination and variations in vocational training systems in Europe. *European Journal of Industrial Relations*, 20(1), 55–71.
- Busemeyer, M. R., & Trampusch, C. (2019). The politics of vocational training: Theories, typologies, and public policies. In D. Guile & L. Unwin (Eds.), *The Wiley handbook of vocational education and training* (pp. 137–164). Wiley Blackwell.
- Bynner, J., & Roberts, K. (Eds.). (1991). Youth and work: Transition to employment in England and Germany. Anglo-German Foundation.
- Council of the European Communities. (1992). *Treaty on European Union*. Office for Official Publications of the European Communities.
- Deissinger, T. (1994). The evolution of the modern vocational training systems in England and Germany: A comparative view. *Compare. A Journal of Comparative Education*, 24, 17–36.
- Deissinger, T. (1996). Germany's vocational training act: Its function as an instrument of quality control within a tradition-based vocational training system. *Oxford Review of Education*, 22, 317–336.
- Deissinger, T. (2005). Links between vocational education and training (VET) and higher education: The case of Germany. In J. Gallacher & M. Osborne (Eds.), *A contested landscape. International perspectives on diversity in mass higher education* (pp. 92–116). National Institute of Adult Continuing Education.
- Deissinger, T. (2007). "Making Schools Practical": Practice firms and their function in the full-time vocational school system in Germany. *Education and Training*, 49(5), 364–379.
- Deissinger, T. (2009). Curriculare Vorgaben für Lehr-Lernprozesse in der beruflichen Bildung. In B. Bonz (Ed.), *Didaktik und Methodik der Berufsbildung* (Berufsbildung konkret) (Vol. 10, pp. 60–88). Schneider.
- Deissinger, T. (2010). Dual system. In P. Peterson, E. Baker, & B. McGaw (Eds.), *International encyclopedia of education* (Vol. 8, 3rd ed., pp. 448–454). Elsevier.
- Deissinger, T. (2015). Verberuflichung und Verallgemeinerung internationale Perspektiven und die Frage nach der Tertiarisierung der beruflichen Bildung. In B. Ziegler (Ed.), *Verallgemeinerung des Beruflichen Verberuflichung des Allgemeinen?* (pp. 57–80). W. Bertelsmann.
- Deissinger, T. (2019). The sustainability of the dual system approach to VET. In D. Guile & L. Unwin (Eds.), *The Wiley handbook of vocational education and training* (pp. 293–310). Wiley Blackwell.
- Deissinger, T. (2021). Zur Relevanz von Handwerkspolitik und Handwerksrecht für die Konstituierung und Konsolidierung des deutschen dualen Systems. In S. Dernbach-Stolz et al. (Eds.), *Transformationen von Arbeit, Beruf und Bildung in internationaler Betrachtung* (pp. 19–39). Springer Fachmedien.
- Deissinger, T., et al. (Eds.). (2013). Hybrid qualifications: Structures and problems in the context of European VET policy. Peter Lang.
- Deissinger, T., & Gonon, P. (2021). The development and cultural foundations of dual apprenticeships A comparison of Germany and Switzerland. *Journal of Vocational Education and Training*, 73(2), 197–216.
- Deissinger, T., & Ott, M. (2016). Tertiarisation of vocational education and training and its implications Problems and issues in Germany and France. In S. Bohlinger, T. K. A. Dang, & M. Glatt (Eds.), *Education policy: Mapping the landscape and scope* (pp. 267–296). Peter Lang.
- Euler, D. (2013). Germany's dual vocational training system: A model for other countries? A study commissioned by Bertelsmann Stiftung. Bertelsmann Stiftung.
- Euler, D. (2014). Berufs- und Hochschulbildung (Ungleicher) Wettbewerb oder neue Formen des Zusammenwirkens. Zeitschrift für Berufs- und Wirtschaftspädagogik, 110, 321–334.

T. Deissinger

Euler, D. (2021). Strukturmodelle in der Berufsausbildung – zwischen stillen Veränderungen und lauten Widerständen. In L. Bellmann et al. (Eds.), Schlüsselthemen der beruflichen Bildung in Deutschland (pp. 200–215). BIBB.

- Euler, D., & Wilbers, K. (2020). Berufsbildung in digitalen Lernumgebungen. In R. Arnold, A. Lipsmeier, & M. Rohs (Eds.), *Handbuch Berufsbildung* (3rd ed., pp. 427–438). Springer.
- Federal Ministry of Education and Research. (2005). Reform of vocational education and training in Germany. The 2005 vocational training act. BMBF.
- Frentzel, G., Jäkel, E., & Junge, W. (1972). Gesetz zur vorläufigen Regelung des Rechts der Industrie- und Handelskammern. Kommentar zum Kammerrecht der Bundesrepublik und der Länder mit systematischer Einführung (3rd. ed.). Verlag O. Schmidt.
- Görtemaker, M. (1989). *Deutschland im 19. Jahrhundert. Entwicklungslinien* (3rd ed.). Bundeszentrale für politische Bildung.
- Goldthorpe. (1996). Problems of "meritocracy". In R. Erikson & J. O. Jonsson (Eds.), *Can education be equalized?* (pp. 255–287). Westview Press.
- Gonon, P. (2013). Federal vocational baccalaureate: The Swiss way of 'hybridity'. In T. Deissinger et al. (Eds.), Hybrid qualifications: Structures and problems in the context of European VET policy (pp. 181–196). Peter Lang.
- Greinert, W.-D. (1994). The "German system" of vocational training. History, organization, prospects. Nomos.
- Greinert, W.-D. (2006). Geschichte der Berufsausbildung in Deutschland. In R. Arnold & A. Lipsmeier (Eds.), *Handbuch der Berufsbildung* (2nd ed., pp. 499–508). VS Verlag.
- Harney, K. (1985). Der Beruf als Umwelt des Betriebs. Vergleichende, historische und systematische Aspekte einer Differenz. In Verbände der Lehrer an beruflichen Schulen in Nordrhein-Westfalen (Ed.), Die Relevanz neuer Technologien für die Berufsausbildung (pp. 118–130). Krefeld.
- Herrlitz, H.-G., Hopf, W., & Titze, H. (Eds.). (1986). Deutsche Schulgeschichte von 1800 bis zur Gegenwart. Weinheim.
- Hordern, J. (2021). Are apprenticeship standards in England supporting expert vocational practice? In CEDEFOP (Ed.), The next steps for apprenticeship (pp. 144–151). Publication Office of the European Union.
- Keep, E. (2015). Governance in English VET: On the functioning of a fractured 'system'. Research in Comparative and International Education, 10(4), 464–475.
- Kell, A. (2020). Organisation, Recht und Finanzierung in der Berufsausbildung. In R. Arnold, A. Lipsmeier, & M. Rohs (Eds.), Handbuch Berufsbildung (3rd ed., pp. 563–568). Springer VS.
- Kutscha, G. (1992). "Entberuflichung" und "Neue Beruflichkeit" Thesen und Aspekte zur Modernisierung der Berufsbildung und ihrer Theorie. Zeitschrift für Berufs- und Wirtschaftspädagogik, 88, 535–548.
- Le Mouillour, I. (2021). Dual VET, Germany. In CEDEFOP (Ed.), *Apprenticeship governance and in-company training. Where labour market and education meet* (pp. 131–138). Publication Office of the European Union.
- Marsden, D., & Ryan, P. (1995). Work, labour markets and vocational preparation: Anglo-German comparisions of training in intermediate skills. In L. Bash & A. Green (Eds.), *Youth, education and work (world yearbook of education 1995)* (pp. 67–79). Kogan Page.
- Muth, W. (1985). Die historische Entwicklung der Lehrabschlußprüfungen bei den Industrie- und Handelskammern. Wirtschaft und Berufs-Erziehung, 37, 328–336.
- Nipperdey, T. (1990). Deutsche Geschichte, 1866–1918, Arbeitswelt und Bürgergeist (Vol. 1). C.H. Beck.
- Payne, J. (1999). Recent changes in school-to-work transition in England and Wales. In D. Stern & D. A. Wagner (Eds.), *International perspectives on the school-to-work transition* (pp. 475–501). Hampton Press.
- Prais, S. J. (1981). Vocational qualifications of the labour force in Britain and Germany. *National Institute Economic Review*, 98, 47–59.

- Raggatt, P. (1988). Quality control in the dual system of West Germany. Oxford Review of Education, 14, 163–186.
- Ryan, P., & Unwin, L. (2001). Apprenticeship in the British "training market". *National Institute Economic Review*, 178, 99–114.
- Schlüter, A., & Stratmann, K. (Eds.). (1985). Quellen und Dokumente zur betrieblichen Berufsbildung, 1869–1918. Böhlau.
- Schütte, F. (1992). Berufserziehung zwischen Revolution und Nationalsozialismus. Ein Beitrag zur Bildungs- und Sozialgeschichte der Weimarer Republik. Deutscher Studien Verlag.
- Seeber, S., et al. (2019). Ländermonitor berufliche Bildung 2019. Ein Vergleich der Bundesländer mit vertiefender Analyse zu Passungsproblemen im dualen System. W. Bertelsmann.
- Steedman, H. (1998). A decade of skill formation in Britain and Germany. *Journal of Education and Work*, 11(1), 77–94.
- Streeck, W. (1991). On the institutional conditions of diversified production. In W. Matzner & W. Streeck (Eds.), *Beyond Keynesianism The socio-economics of production and full employment*. Edward Elgar Publishing.
- Streeck, W., et al. (1987). The role of the social partners in vocational training and further training in the federal Republic of Germany. CEDEFOP.
- Stürmer, M. (2002). Das Deutsche Reich, 1870–1919. Berliner Taschenbuch Verlag.
- Thelen, K. (2008). How Institutions Evolve: The political economy of skills in Germany, Britain, the United States, and Japan. CUP.
- Thomä, J. (2014). Fachkräftemangel im Handwerk? Eine Spurensuche. WSI-Mitteilungen, 67(8), 590–598.
- Unwin, L. (2003). Growing Beans with Thoreau: The importance of skills. Keynote lecture given to the JVET Fifth International Conference on "Researching Policy and Practice in Vocational Education and Training". University of Greenwich.
- Unwin, L. (2019). Nurturing the critical role of the workplace in VET: Reflections from England, past and present. In M. Pilz, K. Breuing, & S. Schumann (Eds.), Berufsbildung zwischen Tradition und Moderne. Festschrift für Thomas Deissinger zum 60. Geburtstag (pp. 175–192). Springer.
- Veblen, T. (1954). Imperial Germany and the industrial revolution. With an introduction by J. Dorfman. Viking.
- Weber, A. (1969/1912). Der soziologische Kulturbegriff. In Verhandlungen des 2. Deutschen Soziologentages vom 20. bis 22. Oktober 1912 in Berlin: Reden und Vorträge (pp. 1–20). Sauer und Auvermann.
- Wheelahan, L. (2016). College for all in Anglophone countries Meritocracy or social inequality? An Australian example. *Research in Post-Compulsory Education*, 21(1–2), 33–48.
- Winch, C. (2006). Georg Kerschensteiner Founding the dual system in Germany. Oxford Review of Education, 32(3), 381–396.
- Winkler, H. A. (1976). From social protectionism to national socialism: The German small-business movement in comparative perspective. *Journal of Modern History*, 48, 1–18.
- Wolter, A., & Kerst, C. (2015). The 'Academization' of the German qualification system: Recent developments in the relationships between vocational training and higher education in Germany. *Research in Comparative and International Education*, 10(4), 510–524.
- Young, M. (2003). National qualifications frameworks as a global phenomenon: A comparative perspective. *Journal of Education and Work, 16*(3), 223–237.
- Zabeck, J. (1975). Die Bedeutung des Selbstverwaltungsprinzips für die Effizienz der betrieblichen Ausbildung. Untersuchung im Auftrage des Ministers für Wirtschaft, Mittelstand und Verkehr des Landes Nordrhein-Westfalen. Mannheim.
- Zabeck, J. (2013). Geschichte der Berufserziehung und ihrer Theorie (2nd. ed.). Eusl.

Chapter 6 Shaping Young People's Decision-Making About Post-School Pathways: Institutional and Personal Factors



Stephen Billett, Darryl Dymock, Steven Hodge, Sarojni Choy, and Anh Hai Le

Abstract The decisions that young people make about post-school pathways are becoming increasingly important because of implications for: (i) personal educational and employment trajectories and goals, (ii) allocation of educational resources, and (iii) meeting a range of community needs associated with the development of occupational capacities. Indeed, there is a growing and global concern that young people are disproportionately participating in higher education which comes at a cost to the level of participation in vocational education and the occupations it serves. This trend indicates a shift in young people's aspirations and their preference for post-school pathways. However, there are implications and outcomes arising from this decision-making, leading to calls in many countries to redress this shift in post-school preferences. There are distinct implications both for young people who have identified a preferred occupation and those who remain undecided about them and the consequences for post-school pathways. Yet, without an elaboration of the societal factors and personal practices shaping and influencing that decision-making, it is difficult to know how to redress that situation. This review examines recent literature addressing the factors and practices shaping young people's decision-making about those pathways. It identifies a complex intertwining of societal (i.e., institutional) and personal factors shaping this decisionmaking. Although societal factors (e.g., SES, location, gender) play important roles in this decision-making, it appears that the practices of parents, teachers and familiars are salient in this decision-making and, therefore, efforts to redress this issue. These findings suggest such practices need to be mediated by enhancing what is suggested by societal institutions (e.g., schools, government), familiars (teachers, parents) and more fully informing young people's decision-making.

e-mail: s.billett@griffith.edu.au

S. Billett (\boxtimes) · D. Dymock · S. Hodge · S. Choy · A. H. Le Griffith University, Brisbane, QLD, Australia

Keywords Vocational education and training \cdot Post-school pathways \cdot Student preferences \cdot Occupational choice \cdot Occupational preference \cdot Institutional factors \cdot Personal practices \cdot Decision-making \cdot Teachers \cdot Parents \cdot Tertiary education policies

Factors Shaping Young People's Decisions About Post-School Pathways

The decisions that young people make about post-school pathways are becoming increasingly important because of the implications for: (i) their personal educational and employment trajectories and goals, (ii) the allocation of educational resources, and (iii) meeting a range of community needs associated with developing the occupational capacities required for realising communities' and countries' social and economic goals. Globally, there are concerns that young people's preferences for post-school pathways and desirable forms of work (i.e. clean, high status, stable) are reducing their participation in vocational education and the occupations it serves (Billett, 2014, UNESCO-UNEVOC, 2018). The preference for participating in higher education over vocational education is leading to skill shortages (Universities Australia, 2008; Wolf, 2016), poor employment outcomes for university graduates (Nägele & Stalder, 2018) and injudicious personal and societal investments. Some accounts identify institutional and personal factors shaping that decision-making as failing to fully and impartially inform young people's choices about post-school pathways (Clement, 2014; UNESCO-UNEVOC, 2018). Certainly, in countries with both advanced industrial and developing economies there is a growing pattern of young people viewing vocational education and the occupations it serves as being undesirable and not aligned with their aspirations (UNESCO-UNEVOC, 2018). This sentiment is seemingly being buoyed by aspirations of parents, school teachers, other familiars and by what is privileged and championed in schooling (Clement, 2014; Fuller et al., 2014; Parliament of Victoria, 2018). Moreover, these studies note that public discourses, portrayals in the print, broadcast and electronic media are also potentially favouring the kinds of occupations arising from university education over those from vocational education (Lasonen & Manning, 2000). Of course, societal preferences for particular kinds of work have long existed and influenced views of their worth in communities and what kinds of educational provision they warrant (Billett, 2011, 2014). Yet, currently there appears to be a growing and unprecedented disaffection, globally, about vocational education and the occupations it serves as, as a post-school option. While heightened aspirations about the kinds of work in which young people wish to engage are welcomed, understandable and encouraged, there needs to be even greater attention to decision-making about their post-school pathways and intended career destination to address ensure their choices are well informed and vocational education is not precluded.

A consequence of heightened aspirations is the undermining of the capacity of vocational education to attract students with the level of capacities (e.g., achievement) for the kinds of technical occupations that advanced industrial societies require (Wolf, 2011, 2016). It seems a range of and an inter-weaving of influences and factors are currently transforming these aspirations into expectations. Consequently, there is a need to understand what is driving this change in young people's decision-making to identify how it can be informed in the future and in ways that can be more impartial, so that vocational educational education and the occupations it serves can be viewed as viable and worthwhile post-school options. It is worth noting here that (Dewey, 1916) proposed two key purposes for education for occupations. The first is to assist individuals identify to what occupation they are suited, and the second is to assist them develop the capacities to practice that occupation. He emphasised that for individuals to find themselves in occupations to which they were not suited (i.e., in uncongenial callings) as being a waste of human capacity and interest. It is this first educational purpose that is the focus of this review.

The smaller proportion of young people seeking vocational education and the occupations it serves as post-school options, to some extent, also can be understood as an unintended consequence of a contradictory governmental discourse. That is, response to the 'knowledge economy' discourse initiated by the Organisation for Economic Co-operation and Development (OECD, 1996), in which member states are encouraged to meet the educational needs of contemporary workers who are required to use knowledge and technology in their occupations. However, in many cases these national policies privilege the role of the university sector in meeting these demands. For example, in Australia, the Bradley review of higher education in Australia explicitly framed expansion of higher education as an appropriate response to the challenges of the global knowledge economy (Bradley et al., 2008). That review recommended a target of 40% of 25-34-year-olds attain an undergraduate degree by 2020 to ensure Australia remained globally competitive. Governmental measures such as 'un-capping' the number of government-funded students that universities could recruit were introduced. It followed that participation in higher education in Australia has increased steadily since 2008, whereas vocational education declined (Noonan & Pilcher, 2018). So, beyond personal preferences there are structural and societal suggestions that are prompting this shift in patterns of post-school choices.

This chapter discusses the factors and processes that inform and shape young people's decision-making about post-school pathways that arise from a review of international literature, the majority of which has been published in the last decade. Unsurprisingly, this literature indicates a complex of institutional factors and personal practices influences young people's decision-making about post-school pathways. Therefore, efforts to redress this issue need to be informed by an understanding of these factors and practices. Consequently, the review reported here sought to, firstly, delineate and elaborate the range of institutional factors and personal practices shaping young people's decision-making, and, secondly, to identify what might be viewed as being worthwhile, viable and attractive post school pathways. The aim here is not to identify ways to persuade, cajole or direct

young people to participate in vocational education, but rather illuminate and understand more fully the process of decision-making that is increasingly ignoring or denying vocational education as a worthwhile and legitimate post-school option. The first concerns elaborated here are both personal - potentially denying individuals having effective and rich working lives, and societal - potentially leading to important private and public sectors not being able to secure skilled workers. Factors here are taken as institutional facts (Searle, 1995), those that arise through and from society and comprise suggestions that shape the goals, pathways, prospects, institutional practices and priorities and the standing of educational provisions and occupations, amongst others (Billett 2014). The review then elaborates the complex of personal practices shaping young people's decision-making about post-school pathways, and also considers how these can be more effectively mediated in schools, by parents and teachers and by the actions of government, to inform that decisionmaking so that vocational education can be considered as a viable post-school option. Personal practices are taken here as what people do and how they make choices and decisions (Billett, 2009). These are shaped by what they know, can do and value. However, whilst delineating institutional factors and personal practices, this is not to set them apart as separate and isolated categories, as they are intertwined and interdependent. The delineation of these factors and practices allows their relationships to be understood and, potentially, actions taken to address their specific contributions to this decision-making.

Review Parameters and Structure

The review of literature reported and discussed here focused on identifying factors and practices that shape school students' decision-making about post-school pathways, be it to further education or the kinds of work or occupations that they wished to pursue. The review is guided by the question:

What complex of institutional factors and personal practices shape young people's decision-making about post-school pathways?

The review draws mainly on research published between 2008 and 2018. Some studies consider one or more demographic factors (e.g., socio-economic or cultural background, gender) and/or highlight institutional factors (e.g., policy, organisational, situational contexts) that may impact on students decision-making. There is a strong emphasis on Australian studies as they are quite predominant in the review. A number of these publications draw on samples large enough to examine the interaction of factors that can illuminate and explain some of the complexity of how these factors shape that decision-making. There are also smaller-scale studies that illustrate and examine in greater depth young people's decision-making about post-school pathways in specific societal contexts. Across this literature, some papers remain focused on straightforward associations between demographic/contextual factors and the inputs/outcomes of decisions. However, other literature frames

decision-making as a more dynamic and complex process, with discussion about: (i) macro-social process founded on economic, cultural and historical conditions, (ii) closer or proximal contextual influences and personal imperatives and practices (i.e., those of teachers, parents and friends), and (iii) personal attributes and preferences that influence young people's decision-making.

A concern identified in this literature is the over-representation of students with particular socio-economic profiles engaging in particular kinds of senior secondary or post-secondary educational options (Gore et al., 2017): a societal or institutional factor. Barriers impacting on students 'decision-making are broad but societally-entrenched, and therefore, are needing of greater elaboration. Moreover, opening all of this up for discussion necessitates a critical evaluation of the vocational education pathways and career choices available to young people, especially those from groups of students who are in different ways marginalised. So, while this literature also identifies means for improving the decision-making process, the ultimate goals are often about informing and widening participation, as well as improving individual choice for post-school pathways. Hence, there is a need to elaborate these different perspectives and reconcile their contributions in ways that illuminates and explains this complex of factors.

Consistent with the research question, the review is organised around what this recent literature informs about how:

- factors such as socio-economic status, location and family background shape decision-making;
- 2. current labour market, school and tertiary education (i.e., higher and vocational education and training) factors shape decision-making; and
- 3. personal factors (e.g. gender, educational experiences and achievement, personal qualities) shape decision-making.

In the following sections, what the recent literature proposes is set out and discussed using the broad categories of institutional factors and personal practices. It commences with a consideration of institutional factors (Searle, 1995) – those of society – under headings of (i) labour market conditions, (ii) tertiary education policy and opportunities, (iii) status of post-school pathways, (iv) societal status of occupations and advice about tertiary education, (v) geography and (vi) gender. Then, practices associated with post-school pathways decision-making, including those associated with: (i) teachers/career guidance officers, (ii) parents and (iii) friends and familiars. Following this, the confluence of institutional factors and personal practices that shape decision-making are discussed in terms of: (i) socioeconomic status, (ii) students' educational experiences and achievement, and (iii) knowledge about VET/careers/occupations. In conclusion, it is proposed that the intertwining of these factors and practices shapes school students' decisions about post-school pathways.

Institutional Factors

A range of broad institutional or societal factors shape the context and process of decision-making. These include: (i) labour market conditions, (ii) tertiary education policy and opportunities; (iii) status of post school options; (iv) societal status of occupations; (v) geographical location; and (vi) factors associated with gender. Collectively, the array of factors can be referred to as institutional facts (Searle, 1995) those arising from and through society. Whilst not claimed to be wholly inclusive, in the following sections, these factors are discussed.

Labour Market Conditions

Labour market conditions are often given prominence as an element of the context in which the decisions about post-school pathways are made. Through illuminating transitions from education to work, Bowman et al., (2015) highlighted that young people's participation in work has changed significantly over the last 50 years, impacted by structural changes in the economy. Education has become longer, and fewer jobs have requirements that do not require tertiary education and certification. So, moving straight from school to work has become a rarity, except for work that requires little in the way of preparation or certification. Chesters (2015) noted that while many school students have little inherent interest in continuing to senior schooling, the restructured labour market (i.e., the change from a goods-producing to a service economy with fewer full-time, permanent, low-skilled jobs) increasingly requires students to complete senior schooling and secure post-school qualifications, usually within specific occupational specialisations.

This extended participation in education is, in part, a response to the changing requirements of work, but also about the increased scarcity of worthwhile work and the greater competition for that kind of work (UNESCO-UNEVOC, 2018). Consequently, the entry requirements for existing jobs are becoming marked by ever higher levels of qualifications being required (i.e., credential creep). So, a pattern is identified in the literature associated with:

... students who have ambitious goals but, due to structural constraints, low socio-economic background, unfavourable labour markets [i.e., societal factors] as well as scepticism regarding their own abilities, decide to take one qualification step after another without losing sight of further or higher education (Cuconato, 2017, p. 54).

Gaylor and Nicol's (2016) evaluation of a career education program in Canadian schools was underpinned by an understanding that 'today's rapidly changing job market is a reality that makes it unlikely that students will end up in the career that they plan for in high school' (p. 20). So, although many tertiary education programs have a specific occupational focus, there is no guarantee that such programs will lead to employment in the preferred occupations of young people and their parents. This is likely to be the case for both higher and vocational educational pathways.

Labour market conditions are mentioned in many studies as societal factors that are shaping decisions about post-school pathways. For instance, Clarke and Polesel (2013) noted the limited impact of high school vocational education programs in a weak and competitive labour market. Such labour market circumstances are prompting higher levels of participation in post-school pathways with expectations that outcomes commensurate with the additional investment in time and resources.

All the above is relevant as high school students are now very much aware of the changing context of the world of work, and the need for post-school education and training has become "naturalised in the student discourse" (Dalley-Trim & Alloway, 2010, p. 121). This practice of the normalisation of these institutional facts brings into play a greater range of factors that young people have to consider now. These factors include the kind and extent of post-school education, its potential costs and outcomes in terms of the current labour market. A consideration here is that the more demanding and complex the range of factors, the greater the need for processes that inform and mediate students' decision-making. Although processes are being adopted in schools and schooling systems to emphasise and advise students about post-school pathways, there is a risk that those young people unable to access informed advice from parents or familiars will be further disadvantaged (Krause et al., 2009). This includes the need to understand how the attitudes and perceptions of young people (i.e., personal practices) from low socio-economic backgrounds are formed about progressing to tertiary education. For instance, what is the impact of the relationship between short-term costs and longer-term payoffs in their decisionmaking and how these interact with specific labour market conditions to shape their preferred educational and careers aspirations. In proposing a model to assist career counsellors guiding young people's decision-making, Bowles and Brindle (2017) acknowledged the dilemmas in referring to occupations that may not exist in the future. Yet, these kinds of imperatives and processes in schools to assist decisionmaking and mediate gaps in information, may merely serve to drive growth in aspirations that will need to be realised through participation in higher education and further discount what vocational education and the occupations it serves can offer. So, contemporary uncertainties about occupations for the future, the relative scarcity of desirable kinds of work (i.e., societal factors) and increased interest in and expectations about securing that work (i.e., personal practices), mean that informed and carefully considered decisions about post-school pathways are more essential than ever to navigate these challenges.

Tertiary Education Policy and Opportunities

The kinds and available provisions of tertiary education also shape young people's decisions about courses they select and in which they participate. From examining Australia's tertiary education system, Fowler (2017) described the boundaries and connections between its two sectors – higher education and vocational education and training – as confused and contested. He identified a disjunction between the

qualifications obtained in the two sectors, and that students (and the employers who will eventually employ them) are making a 'sensible' decision when they opt for higher education's broad-based qualifications over vocational education. The preferred educational alternative here is held to more likely produce graduates with the capability to manage their own uncertain future and adapt to changing workplace needs (Fowler, 2017).

What is evident is that whereas some courses within universities are often quite occupation-specific, there are also a wide range of choices for young people who have not decided their preferred occupation (i.e. occupational uncertain students) (Sikora, 2018). Hence, whether referring to the broad field (e.g., engineering, science) or a field that is not particularly aligned to educational practices (arts, humanities), universities offer a range of options for young people, particularly for those who remain undecided about their preferred occupation. However, the same is less true of vocational education provisions that often tightly occupational-specific, which are championed as their distinctiveness. Hence, for those young people who remain undecided about their preferred occupation at the end of schooling, higher education offers more viable and attractive pathways (Sikora, 2018).

Some studies highlight the pragmatic factors that students are presented with in selecting their post-school options. Brown's (2017) found students choices about vocational education were informed by factors including: proximity to home, the timing of offerings, and affordability as important considerations. Given the social source of these constraints and costs, such factors can be seen as being societal. Other institutional factors included employment prospects (i.e., the quality and relevance of a program) the quality of provider, and the source of advice. Brown described some of these as 'non-choices' because of the limited choices available in non-metropolitan locations, thereby being aligned with findings by Webb et al. (2015). Difficulties and costs associated with relocation from rural and regional areas were also mentioned by McIlveen et al. (2012) and by informants to an inquiry into career advice in the Australian state of Victoria (Parliament of Victoria, 2018), and stand as important societal factors.

In this way, the heightened emphasis on longer schooling and need for and arrangements for planning for post-school options may merely provide a platform for school students to conclude that higher education is more attractive than vocational education, unless their selected occupation is one prepared through it. Yet, these factors may well play out differently across students in metropolitan and regional locations.

Policy Goals and Initiatives

Although the low standing of vocational education and the occupations it serves as a global concern, its manifestations and, therefore, impact and potential remedies are likely to be quite country distinct so as policy goals and initiatives associated with this low standing (Billett, 2020). For instance, in Norway (Hiim, 2020) and Denmark (Aarkrog, 2020), there is a clear effort to improve retention in vocational

education programmes, which are a common form of postschool education. Hence, efforts about improving the standing of vocational education are directed towards improving its quality. This includes specific teacher education, curriculum reforms and to more closely align what is taught and experienced in Norway, for instance, to align vocational education provisions with the requirements of work (Hiim, 2020). In Finland, there is a concern also about declining numbers of school-leavers who are progressing into vocational education but a large component of the vocational education student cohort are adults and whose engagement in initial vocational education is not primarily a follow-on from school, but something into in early adult life (Rintala & Nokelainen, 2020). Hence, the key focus of policy goals in this country is often associated with the quality of the learning experience and how this can assist students and graduates develop the kinds of capacities that will be effective in workplaces (Rintala & Nokelainen, 2020). Yet, in Denmark, for instance, the focus is on elevating the standing of vocational education through making entry requirements more difficult and making the institutions and programs more attractive to young people (Aarkrog, 2020). However, the consequence appears to have been a less inclusive provision of education, and one that excludes socially marginalised students, including those from migrant backgrounds. In Spain, initial reforms of vocational education were directed towards addressing issues of low literacy of those participating in vocational education institutions (Martínez-Morales & Marhuenda-Fluixá, 2020). Hence, the need to integrate vocational education provisions with schooling in which the academic curriculum is being enacted. Later, curriculum initiatives were enacted to make the content and focus less on 'academic'considerations and more on those associated with the requirements of work

Also, to overcome views that vocational education is 'dead-end', arrangements are being implemented to ensure that there is articulation to higher education (Billett, 2020). Unlike other countries, participation is not so much a policy concern in Switzerland but the overall outcomes for completers (Stalder & Lüthi, 2020). Central here is the progression to higher education and to augment vocational qualifications with degrees, thereby will be realising work-related outcomes for vocational education students that are comparable with those who participated directly in higher education (Stalder & Lüthi, 2020). Moreover, it was found that not only levels of salary but also measures of work quality (i.e., discretion and collegiate interactions) or equivalent also arise from progression on these pathways. It is noted that the standing of qualifications at the commencement of working life is a key determinant for productive career progression and quality of work (Stalder & Lüthi, 2020).

Curriculum Initiatives and Practices

Curriculum initiatives associated with enhancing the status of vocational education also differ depending upon the kind of goals that are attempted to be achieved. For instance, in Norway curriculum initiatives attempt to make the curriculum more theoretically premised were intended to make it more educationally attractive to young people (Hiim, 2020). Moreover, the structuring of an initial broadly focused set of experiences to address broad industry sectors rather than specific occupations was an attempt to render it less narrow. In Denmark, the initiatives include providing youth-orientated learning environments, transition from VET to higher education, improving the quality of training and provision of workplace experiences (Aarkrog, 2020). In Australia, information strategies are being deployed by both federal and state governments to inform students about occupations and vocational education in ways intended to promote informed and impartial decision-making about postschool pathways (Billett et al., 2020). As noted, in Spain there were a series of reforms to initially dignify and give greater educational rigour to vocational education and then to make it more relevant to the world of work and occupation it serves (Martínez-Morales & Marhuenda-Fluixá, 2020). Hence, initial reforms were aimed to provide more general education, which later was overturned by considerations about modernising the vocational education provision to make it more occupationally relevant with the guidance of industry stakeholders.

Issues associated with improving pedagogic practices to make the learning experiences better and to address specific educational concern such as the development of conceptual knowledge also featured in Finland, Denmark, Norway and Spain. For instance, in attempts to dignify vocational education in Norway (Hiim, 2020), an emphasis on improving teacher quality through a more extended period of preparation has been introduced. Here, there is a specific attempt to address the parity question by providing students with educational experiences which are designed and enacted by qualified teachers. The provision of workplace experiences in the curriculum is adopted to enhance the relevance and the provision of authentic work experiences, for instance in Denmark (Aarkrog, 2020). Yet, as with curriculum initiatives, without actions to find ways of engaging with young people and their parents, these structures alone may be insufficient. So, whilst governmental action often focuses on enhancing the provision of vocational education, seeking to align its purposes and processes with the world of work, unless what is being proposed is going to engage young people, it may not be very effective (Billett, 2020).

Status of Post-School Options

Some discussions in the literature focus on the perceived low status of vocational education and, therefore, of how students, teachers and parents might be persuaded to overlook it as a viable and worthwhile post-school option. Much of this discussion presents as a struggle against strong societal sentiments that inherently privileges higher education. A survey of European Union countries found that vocational education was discounted when compared with general education and considered as a 'second choice for second-rate students' (Cedefop, 2017, 1). Also, in Europe, Deissinger and Ott (2016) noted that since the 1960s, the French Government had introduced various measures aimed at increasing the general and theoretical content

of vocational curricula to improve the esteem of vocational pathways, although without convincing gains. Comparatively, in Germany, Deissinger and Ott (2016) concluded that the 'dual system' until recently had been perceived as providing sufficient transition between vocational and higher education. However, now, the increasing number of school students aspiring to have a university education has become a new challenge for employers, industry bodies (i.e., Chambers of Commerce) and educational institutions there. For example, the concept of different pathways leading to equally rewarding employment outcomes is a particular strength of the Swiss VET system (i.e., apprenticeships). The prevalence of higher education qualifications has become a growing concern for VET graduates without a tertiary-level degree (Stalder & Lüthi, 2020). That is, they might be pushed into lower-quality jobs and careers with limited opportunities for learning and progression. Thus, one response has been to offer apprenticeships in technical work via degree level programs (Deissinger, 2005).

Yet, this societal disaffection for vocational education extends to countries with developing economies (UNESCO-UNEVOC, 2018). To take other examples from a series of cases from the Middle East it was reported:

... there is a vicious cycle of negative image, low quality and low self-esteem related to TVET, its students and even its teachers in the Egyptian society and culture. This phenomenon, is well documented and acknowledged however very little is being done to create awareness to change this. (El-Ashmawi, 2017, p. 5)

Social perspective towards vocational training in general is negative which led to minimal participation in VET in Jordan. (Rawashdeh, 2017, p. 14)

... TVET in Lebanon is socially looked as low image, and the choice of those who have no choice. (Ghneim, 2017, p. 16)

In general, it is socially looked at the TVET sector as low image, and the choice of those who have no choice: it remains a second option for youngsters.... The image of the apprenticeship training and WBL schemes is looked at in a lower social view – Palestine (Jweiles, 2017, p. 6)

Haybi-Barak and Shoshana (2020) draw out the very sharp distinctions made between 'technological education' and 'vocational education'. The former is seen to represent modern and emerging forms of work that are high status and important for the economy and, the latter, associated with skills that are manual, menial and associated with earlier forms of work. Moreover, the distinction extends to the kinds of people who participate in each of these two sectors. In particular, vocational education is associated with lower educated migrants who exist on the periphery of Israeli society, and who make martial contributions to the economy. Such societal sentiments are quite potent in levels of participation in vocational education and retention in the occupations served by it in these countries (UNESCO, 2018).

In these ways, what is projected by schools and teachers is often held to be complicit in devaluing vocational education as a worthwhile pathway for 'good 'students (Dalley-Trim et al., 2008). Such is the concern that a concerted, coordinated effort that uses inclusive, non-stigmatising, non-deficit language is being suggested while highlighting the full range of opportunities and pathways is now required

(Gore, et al., 2017). These authors propose that a change in institutional practices is required to improve perceptions about and increase interest in vocational education as they found that students from a young age form the impression that university is a preferable aspiration to vocational education. Webb et al. (2015) also proposes explicitly raising the status of and increasing information about vocational education options available to young people in such a way that 'assumptions about the "type" of students for whom vocational education is suitable' (p. 53) are eliminated. These calls to raise the status of vocational education mirror recommendations made by Maxwell et al. (2000) earlier report on how people choose vocational education and training programs. Hence, the kinds of suggestions or messages projected by the likes of teachers and parents are influential because they are pervasive and ubiquitous.

S. Billett et al.

Snowden and Lewis (2015) examined two types of messages being projected about the participation of students from social and economic backgrounds that do not normally participate in higher education in the period following the implementation of new national student participation strategy. They did this by examining reports from the print news media and institutional messages from three universities and a state vocational education system. They found distinct differences between how university education and vocational education were represented: 'elite and exclusive' versus 'having less rigorous academic standards suited to those who aspire to develop trade employment skills' (p. 585). They concluded that such messages undermine higher education participation goals and contribute to 'to an increasing social divide where educational achievement is the fault line' (p. 585).

Also, in Australia, Hargreaves and Osborne (2017) noted that at both primary and secondary levels of education, vocational education was held in low esteem as a pathway, even though it was well-regarded in providing practical learning, and for selected students (e.g. low-achieving). Similarly, Pilcher and Torii (2018) concluded that, despite not being intended for this purpose, the Australian Tertiary Admission Rank (i.e. university entrance scoring system) continued to dominate nationally as an indication of student achievement, not only in schools but also in the community generally. In some ways this is hardly surprising. When student achievement can be reduced to a single number, it represents a very simple way of comparing and ranking achievement. Consonant here, a survey of over 2000 Australian young people aged between 15 and 21 asked how their school positioned apprenticeships, found that 21% of schools positively encouraged them, 41% promoted them as equal to other options, 9% said the school was negative about them, and 29% reported that they were not mentioned as an option (Bisson & Stubley, 2017). Yet, contrary to this relative even-handedness, Wyman et al. (2017, p. 23) proposed that what he called the 'university or bust' mentality is responsible for diverting Australian students away from vocational education at a time when the number of occupations on the national skills shortage list had increased, thereby exacerbating the supply and demand gap.

Indeed, calls for reform of the vocational education sector in Australia to make it more attractive are supported from the available evidence that: (i) vocational education outcomes are declining with fewer graduates believing their vocational

education qualifications led to better employment outcomes, (ii) declining postcompletion rates of employment, and reduced employer satisfaction (Torii and O'Connell, 2017; Australian Government Productivity Commission, 2017). Similarly, a review of vocational education in the UK made recommendations for vocational education options in the high school curriculum aimed at ensuring lowerability students were not unilaterally shunted into vocational and 'pseudo-vocational' courses that might limit future educational and employment opportunities (Wolf, 2011). In their recent report, Wolf et al. (2016) indicate that a crisis is emerging with far too few young people considering technical work as a viable post-school choice. It seems that one factor that is driving this decision is that of the low status of the occupations that vocational education serves. Hence, people might suggest that the case for parity between vocational and higher education is closed. That may be so, but societal discourse that is positive and productive rather than inherently negative is required for not only the viability of the provision but also for the sense of self of those who work in the sector and those who are vocational education students (Billett, 2020). For example, Stalder and Lüthi (2020) indicate how personal resources that are central to securing effective job outcomes include individuals' appraisal of their worthiness, effectiveness and capabilities as a person.

Societal Status of Occupations and Advice About Tertiary Education

As rehearsed above, the standing of vocational education and the occupation it serves is globally perceived to be lower than those associated with higher education (Clement, 2014, UNESCO-UNEVOC, 2018). This has an impact in terms of the support given to vocational education by governments, schools, and how it is engaged with by young people and their parents (Cedefop, 2014). Beyond parents, most studies indicate that practices in schools and the actions of teachers and career guidance counsellors is important in young people's decision-making about postschool pathways. Advertently or inadvertently, students' decision-making is shaped by teachers' preferences and experiences that are suggested through their interactions (Cedefop, 2014; Clement, 2014) and that these privilege higher education and militate against vocational education as viable post-school options. In the Victorian state parliamentary inquiry (2018), employers and industry groups also expressed concerns about the quality and kind of career advice in schools. As elsewhere (Fuller et al., 2014) they claimed that career development processes at schools are: (i) providing inaccurate information leading students to make poor career choices; (ii) that career practitioners at schools are unaware of the career options available within industries and how the nature of work in industries is changing; and (iii) that schools appear to direct students towards university, rather than apprenticeships and vocational education because trades are seen as 'second-rate' options.

It is difficult not to conclude that what is being suggested to young people either explicitly or implicitly through everyday conversations and interactions with teachers, parents and others may come to influence their decision-making about post-school pathways. This decision-making does not necessarily progress on an informed and considered way. Instead, it is premised on the personal experiences and preferences of parents and teachers (Billett et al., 2020). The risk here is that what is preferred and privileged familiars who are in positions of potential power and influence (e.g. teachers, parents) proceeds in ways that may compromise informed decision-making and being premised on young people's interest. It would be unfortunate if the exercise of those young people's decision-making was only exercised later in them electing to withdraw from occupations and pathways that are not of their choosing. Unfortunately, that withdrawal is evident in a range of sectors.

Geographical Location

Institutional factors include those associated with geographic location. The aspirations of adolescent girls living in rural parts of the Australian state of Tasmania were couched in response to 'recent participation policy in Australia implying young people from rural locations lack aspiration' (Hawkins, 2014). The girls in Hawkins' study had many and varied aspirations, including for higher education. Hawkins proposed it was balancing this variety of aspirations that influenced their educational and career decision-making, rather than low aspirations.

McIlveen et al. (2012) evaluated a university-developed residential career development program for high school students living in rural and isolated areas in Queensland. Participants reported being exposed to a much greater volume of career information and resources in this program than they had been through their school and it also facilitated their sense of belonging and social connection to a tertiary environment. Information gaps and resource shortages were also identified as a problem in regional Victoria (Parliament of Victoria, 2018). The concern here is that if geographical location also leads to limited information and reduced means of associating with tertiary education (i.e., institutional factors), then such students might make incomplete or less-informed decisions.

Location, particularly for young people who live in places characterised by socio-economic disadvantage, has both physical and social effects and plays a key role in young people's aspirations and deliberations about the future (Webb et al., 2015). Practical and structural aspects of place that may constrain young people's aspirations and decisions include distance/lack of transport/costs of travel to (an already limited number of) education providers and programs. The specific and localised influence and expectations of family, friends and social-networks could also limit young people's aspirations 'in ways that were gendered, and which replicated family and local traditions' (p. 8). At the same time, local places were often seen as close-knit and supportive communities, yet the support and advice found the main work to limit decisions about post-school pathways. A Swedish

study of young people's choices of upper secondary schools (Lidström et al., 2014) found that their 'horizons of action' and decision-making seem to vary, according to the locality (e.g., geographical factors, degree of competition and urbanity). Aypay (2003) commented on the place of cultural capital and social support in Turkey in educational choice generally, and found that for Turkish middle school students, selection of a general or vocational school was based more on status attainment factors, such as living in an urban environment and academic achievement, than on parental guidance.

So, geographical factors are not neutral here. They play roles in young people's decision-making. This can include the access to opportunities and options and that the influence and knowledge of post-school pathways may differ across communities and locations.

Gender

Gender has long been a mediator of occupational choice, and as shaped by societal factors (i.e. institutional facts). Gore et al.'s (2017) study on the vocational educational aspirations of primary and secondary school students indicates that boys were more likely to express an interest in vocational education and related occupations, than girls, rehearsed that belief. They found gender stereotypes are prevalent in students' career choices and proposed that VET providers and schools can play a role in supporting female participation in non-traditional areas. However, although analyses of longitudinal datasets enabled them to capture genderdifferentiated data, they found no or minor differences. Sikora (2018) found that male school students who were occupationally uncertain as teenagers had less academic success than occupationally decided students. They enjoyed school less and were less likely to be first- or second-generation migrants. Indigenous males were even more likely than other males to be uncertain, at 16, about the job they would have at age 30. Among female students, only lack of enjoyment of school and lower SES background predicted occupational uncertainty and these variables had little explanatory power. Two other studies, also drawing on longitudinal data, found that there was little difference between genders on the perceptions of usefulness of career advice (Rothman & Hillman, 2008), or as a predictor of young people's aspirations to complete Year 12 or to commence university study after completing school (Gemici et al., 2014).

Patterns of vocational education and university participation in the four low socioeconomic status neighbourhoods investigated by Webb et al. (2015) were highly gendered and followed family traditions and expectations. This was particularly true for young men who often took on similar work to their fathers and other key male role figures, but less so for girls.

In sum, it is noteworthy that a range of institutional factors – those from and projected by society and social institutions – make suggestions about the kinds of work that are available, what occupations and pathways are seen as being worthy of

aspiring young people and their parents. It is proposed that educational policies and practices reinforce particular emphases, and privilege higher education as being far more desirable than vocational education. This is a phenomenon that exists globally, and in both countries with advanced industrial economies and those that are described as developing (Cedefop, 2014; Clement, 2014; UNESCO-UNEVOC, 2018). These institutional factors are suggested by the social world explicitly and implicitly. However, it is important to understand how these suggestions are engaged with and practised by young people, their parents and familiars in decision-making about post-school options. So, it is now worth elaborating the nature and means of those practices.

Practices Associated with Post-School Pathways Decision-Making

The practices shaping young people's decision-making as identified in the literature care categorizable under three broad headings: schooling practices, parents' and familiars' practices and students' practices. Each of these then has sets of subcategories. Schooling practices comprise those that are a product of: (i) school practices and policies and (ii) teachers' and career guidance officers' influence. Practices of parents and familiars are related to (i) cultural factors and (ii) engagement and influence. Those practices associated with students are associated with their: (i) socio-economic status; (ii) their educational experiences, including perceptions of achievement; (iii) knowledge of post-school pathways and (iv) gender. These categories whilst focussing on the personal practice also accentuate the interdependence with institutional factors (e.g., location).

Practices in Schools

Schools and those who teach in them play a significant role in influencing students' decision-making in both everyday and specific career development practices, though the nature of information and support can differ. The role of schools in providing information, realistic and appropriate guidance in decision making, and support to pursue the widest range of options is especially important for low SES students as their parents may have limited knowledge and levels of engagement (Krause et al., 2009). These are examples of institutional facts (Searle, 1995). For instance, most Australian students participated in at least one career advice activity during their senior schooling (Rothman & Hillman, 2008). These activities included the distribution of printed textual material (the most common), attendance at talks by tertiary institutions, and individual or group discussions with career advisers. The more activities students participated in the more likely they were to report finding

the advice provided useful. However, these researchers also found that young people who work part-time while at school may have a stronger sense of their career interests and may perceive the worth of school-based career advice differently from those who are not working. In another study, participation in school-based career activities and searching for career information varied between those who aspired to attend university and those who did not (Gore, et al., 2015a).

In Denmark, a five-day program introduced into schooling to assist young people make decisions about postschool pathways (Aarkrog, 2020). However, it seems that this is not wholly effective, possibly because the career guidance counsellors were not equipped for the role (Aarkrog, 2020). For students who had decided their occupation, this program did little to change their choice, and for those who haven't, it seemed not to be impactful. When appraising the series of reforms in Denmark, Aarkrog (2020) concludes that these initiatives are not sufficient. That is, intentional initiatives that do not engage or help young people, from their perspective, may be fruitless. This extends to whether young people see the occupations that vocational education prepares them for are worthwhile and worthy of engagement.

There are reported differences in perspectives between students and educational providers about the worth of career development services in schools (Rainey et al., 2008). Providers claimed they delivered a wide range of services (i.e., career education, information, guidance, advice, placement and referral), but students reported that these services focused on print-based information. Most young people in this study reported a positive view of vocational education, but improvements in the distribution of information about VET were needed. Computer-based sources and experience-based interventions, such as placement and referral were two services that were requested. Noteworthy, in research undertaken 10 years later, Galliott (2017) queried the increasing use of online career information and guidance systems. She notes the use of online resources presupposes that young people possess the agency and capability for problem identification, information searches, the evaluation of alternative solutions, and making rational choices about postschool pathways. She suggested that such resources were more likely to be effective when combined with face-to-face advice that has been echoed elsewhere (Galliott, 2017). Here, the salience of personal decision-making practices of students and those providing advice about (i.e., school counsellors, guidance officers) and actual educational experiences (teachers) come to the fore, and together, as being salient for personally-appropriate outcomes.

The institutional role and practices of career advisers itself is often problematic, with Clarke (2015) reporting that they are often under pressure from school administrators in giving priority to certain types of careers and related educational choices. They also often lack the resources and time to make links to industry and vocational education. Perhaps these factors contributed towards the result of a survey of almost 300 young people in Australia which showed that only 25% of them identified 'career advisor' as a trusted source of advice re jobs and education, compared with 48% for parents/caregivers, 43% via web search and 32% for friends (Bisson & Stubley, 2017).

Students who held positive attitudes towards school and reported having a positive relationship with their teachers, and who received different forms of career guidance were more likely to enrol at university and did so at earlier ages (Tomaszewski et al., 2017). However, not all forms of career guidance were found to be equally associated with the probability of university entrance. The strongest positive associations were found in talks by vocational education or university representatives, and schools' career advisors. In contrast, employer representative talks and group discussion about careers were negatively associated with the likelihood of university enrolment, once other factors had been eliminated.

While most studies highlighted the role of schools in students' decision-making as a provider of information and guidance, Chesters (2015) identified another influence. She found that the level of disadvantage of the school attended in Grade 9 (i.e. junior high school) was associated with the pathway taken through school. This was interpreted as an indication of peer-group effects on students' aspirations. She concluded that students with less well-educated parents, particularly those attending schools with high concentrations of similarly disadvantaged students, needed extra assistance to overcome their reluctance to pursue a university pathway through secondary school (Lamb et al., 2018).

In these ways, practices within schools were seen influencing school students' decision-making but in ways that were not impartial or open to an unfettered consideration of vocational education as a post-school option. Indeed, rather than mediating social disadvantage and disassociation those practices might well exacerbate them.

Teachers and Career Advisers' Practices

Beyond studies examining the role of school practices in students' decision-making, some research has specifically examined the practices of teachers and career advisers in that process. Adolescents were found to be more likely to talk about their future plans with teachers (around 30% of adolescents) than with school guidance or career counsellors (12–13%) (Baxter, 2017). Likely, conversations with teachers will be of a different kind than those with guidance offices and career counsellors. The former might frequently arise through everyday classroom interactions with students, whereas the latter may well be within focused conversations on school pathways. Those with teachers may well arise through discussions and less structured everyday interactions, yet also reflect the experiences and societal biases of those teachers. Differing views about the importance of teachers and advisers' practice is, however, evident across the research. Yet, evidence from a recent study indicates that teachers (and parents) may under-estimate their influence on young people's decision-making, whilst over-estimate that of school counsellors (Billett et al., 2020). Yet, this may play out differently across communities. Given rural students' 'strong and informed' views about their future career options, Dalley-Trim and Alloway (2010) concluded that career advisers and teachers in regional secondary schools were working effectively to inform and encourage students. They proposed that these staff were well-positioned to inform students about post-school options in the changing world of work and the consequent need for further education. This practice appears to be an analogous to what an Australian government inquiry found (2018). This observation is also supported by (Fuller, 2014) who found that UK high school teachers' practice was not sufficiently informed about and have experience of areas outside their teaching specialisations to provide helpful career information and advice. However, the teachers surveyed also claimed that a particular advantage they had as career advisers was their personal knowledge of students' capabilities, although on occasions this was offset by apparent bias towards recommending the subjects they taught.

It can be seen from this section that the practices of schools and those working in them can be highly influential in the decision-making of young people. Indeed, most surveys (Clement, 2014; Billett et al., 2020) indicate that their classroom teachers are second only to those of parents who influence decisions of young people. Hence, it is important to understand how those of these other familiar – parents and care-givers – play out.

Parents/Caregivers/Familiars' Practices

Parents are reported in most studies to be the key influences on young people's decision-making Yet, a concern here is the degree by which that advice is informed, engaged with and influential. So, the practices of parents and familiars are central to this decision-making and these factors can be categorised in two ways: (i) family and cultural background and/or (ii) direct influences of family members and familiars. These are briefly discussed in turn.

Family/Cultural Background

Many studies reported in the literature, concluded that familiars, and, in particular, family members, directly or indirectly influence decision-making about post-school pathways (Clement, 2014; Billett et al., 2020). Direct influence is that of engaged parents who have views about such pathways. Indirect influences arise from what is observed, heard and otherwise experienced by young people. However, these are not straightforward, linear or compelling suggestions, because young people are not necessarily influenced by them (Billett et al., 2020). Instead, they mediate them relationally. The relationships among perceived parental or carers support (i.e., fathers and mothers' perception of the support they provide), the adolescent's perception of the support their parents provide, their career self-efficacy (the degree of belief a person can successfully make significant career decisions), and their career choice were investigated in Italy by Ginevra et al., (2015). They found that parents 'perceptions of support predicted their adolescents' perceived parental

support. Moreover, adolescents' perceptions of parental support indirectly predicted career choice through the mediating effect of career self-efficacy. That is, the more adolescents feel supported, the more they consider themselves able to cope with the tasks of identifying goals, seeking out information, and making choices. This high degree of career self-efficacy is reported to have enhanced their career choice. These authors also found that compared with fathers, mothers have a greater perception of themselves as being supportive of their children's career development and suggest that this is related to the higher involvement of Italian mothers in their children's lives. A survey of students in the Czech Republic (Hlad'o & Ježek, 2018) similarly found that mothers were perceived as more engaged in educational or career choices than fathers. In this study, mothers with a tertiary education were seen to provide increased support and action.

Yet, that support might require specific focuses and processes. For instance, Powers and Myers (2017) found that US first-generation college students favoured vocational education information that provided insight into the tasks and environments of particular careers, giving them a better picture of what they might expect. This sort of message was held to be reinforced if and when it promoted personal fulfilment through self-actualization and linked the career advice to appreciation of the students' capabilities by teachers and fathers. For this type of student, mothers were viewed as most encouraging, but not always well-informed, and friends were cited as the strongest sources of discouraging advice about careers (Powers & Myers, 2017). In a study of school-to-work transitions in eight European countries (Cuconato, 2017), staff in schools appeared to have definite ideas and expectations about how parents should support their children and how this should manifest in their participation in the school. Since these expectations were aligned to the needs of middle-class parents, they may have disadvantaged those from low SES and/or migrant backgrounds (e.g. timing, language difficulties) (Ule et al., 2015). The study also identified the difficulties immigrant parents may have with understanding how the education system works and the sorts of support that are available. Socio-economic standing (SES) is often defined with respect to parental education and occupation as outlined below in the discussion of the Longitudinal Survey of Australian Youth research (Homel & Ryan, 2014). Krause et al. (2009) also noted that most low SES higher education students come from families who have never had a member attend university, and whose parents often have limited educational background and no post-school qualifications.

Families in some ways also reflect the social and cultural environment in which they exist. Students with less-educated parents were more likely than those with university-educated parents to undertake a vocational education pathway (Chesters, 2015). Furthermore, as noted the level of disadvantage of the school attended in Year 9 exacerbated the effect of parental education. Chesters (2018) followed up this earlier study to examine links between parental education, pathways through senior secondary schooling and post-school outcomes. Students with at least one university-educated parent were less likely to take a VET pathway through senior secondary, even after controlling for level of achievement in Year 9. Students who

took a non-university pathway were more likely than other students to be not engaged in either employment or study 6 months after completing Year 12.

Other cultural factors have been identified. Galliott et al. (2015) found that 'career uncertain' students in Years 9–12 were more likely to speak English as their only home language, while 'career certain' participants were more likely to speak other languages when at home. There were no differences in parents' participation in employment; however, a significantly higher proportion of career uncertain students reported parental occupations associated with lower SES than career certain participants. All of this suggests that homes with native English-speaking parents are more likely to be uncertain. Yet, it is unclear whether this result is because parents want their children to do non-specific higher education degrees or because they are unable to advise about preferred occupations.

The inquiry into career advice activities in Victorian schools (Parliament of Victoria, 2018) was advised that family and community networks are highly significant for Aboriginal and Torres Strait Islander communities and their young people rely heavily on family network to find out and make decisions about their post-school options. A similar claim was made for students from culturally and linguistically diverse backgrounds, particularly those with refugee and migrant parents. However, Tomaszewski et al. (2017) found that young people from non-English-speaking backgrounds were more likely to enrol in university than those from English-speaking backgrounds. They suggested, however, that the category of 'non-English-speaking background' is not an effective indicator of disadvantage in the contemporary Australian educational context because of the heterogeneity within the group. They also identified young people from single-parent families and those living in large families as being significantly less likely to enrol in university than other young people.

The difficulty of identifying which factors are relevant is highlighted by Haywood and Scullion (2018), who eschewed what they saw as the typical quantitative research approach on this issue in favour of a phenomenological one, on the grounds that choosing a higher education course is a shared experience rooted in the experience of everyday lives, not an individual decision.

Regardless of whether the students were decided or undecided, family background factors influence decision-making in different ways depending upon SES factors broadly. Yet, as has been noted, using single measures such as 'migrants' or 'English-speaking' may be too broad as categories to confidently draw conclusions about how to improve decision-making for post-school pathways for specific groups.

Practices of Family and Friends

Many studies emphasised the key role played by family and friends in decision-making (Clement, 2014). Adolescents were more likely to talk to parents than any other group about their future careers, with close to 90% of both boys and girls saying they did so (Baxter, 2017). In comparison 75% of girls and 63% of boys said they talked with peers. Parental practices and influences were one of the strongest

predictors of occupational aspirations – students whose parents wanted them to attend university aspired to higher status occupations than those whose parents had no university expectations for them (Gemici et al., 2014). They also found that students whose friends plan to attend university were much more likely to plan to attend university themselves. In this way, peer influence is seen to the explain variations about choice.

Bowen and Kidd (2017) drew on the work of various advocacy groups to propose that young people's reliance on families as sources of information and support were particularly pertinent for young Aboriginal and Torres Strait Islander people, those from rural and remote communities, and those from refugee and migrant backgrounds. The crucial role of parents for these groups reiterates the findings of the Victorian parliamentary report outlined above (2018). More broadly, the practices of family, friends and peers) were held to be trusted information sources guiding students' choice of VET courses and providers in regional and metropolitan Victoria (Brown, 2017).

While many studies provide evidence that the practices of family, particularly parents, and friends are highly influential in decision-making, some caution that this may not always lead to well-informed and personally-appropriate decisions (Billett et al., 2019). Also, evidence to the Victorian parliamentary inquiry (2018) raised the possibility that a mismatch between parents' understandings of career options (influenced by their own education and employment experiences) and the realities of the labour market could lead to poor decisions. Students from a rural background reported a university-developed career development program as being able to provide information that their family, friends, and local networks could not (McIlveen et al., 2012). Similar concerns were raised in relation to the quality of information available in socio-economically disadvantaged communities (Lamb et al., 2018, Webb et al., 2015).

The high reliance on parents found in the Bisson and Stubley (2017) survey raises questions about how well-equipped parents are to offer such advice, especially given the findings of a study (Bedson & Perkins, 2006) that only 11% of some 300 parents surveyed felt prepared enough for such a role and 77% admitted they had insufficient knowledge. Phillips (2012) suggested from US experience that there is a need to re-educate parents about the value of occupations that are not high on the social status scale and about the high level of cognitive and manual skills needed in many contemporary vocational education-related occupations, a sentiment shared by Rose (Rose, 2004), Crawford (Crawford, 2000) and Sennett (Sennett, 2008).

What this literature advises is that broad societal factors shape opportunities in ways that exercise the suggestion arising from social status, location, familiars, but that the practices of schools, teachers, career guidance officers as well as those within families both mediate these factors and make their own contributions to that decision-making. These practices may reflect incrementally changing aspirations and expectations that are a product of growing affluence, and a more educated community, with higher aspirations for young people and populations becoming more metropolitan and schooling becoming longer. All of this emphasises the importance the practices of parents, familiars and others who provide direct advice

to young people. Those with regular and close interactions with young people are deemed to be most effective, and in schools these are the teachers who engage with students daily and share a range of experiences and preferences (Billet et al., 2020). Hence, the practice of these teachers is important, as Gore et al. (2017) concluded, as is those of parents and other familiars.

Student Factors and Practices: The Confluence of Institutional Factors and Personal Practices

The range of influences on young people's decision-making practices about postschool pathways are a combination of how the institutional factors and personal practices come together and are shaped in that decision-making process. These influences are categorised here as being threefold. They comprise: (i) the social economic status of students; (ii) individual preferences and experiences; and (iii) knowledge about post-school pathways.

Socioeconomic Status

Students' socio-economic status (SES) background influences their post-secondary educational decision-making, as has been identified in large-scale longitudinal studies in Germany (Becker & Hecken, 2009), England (Gutman & Schoon, 2012), and the United States (Oymak & Hudson, 2018). Becker and Hecken (2009) sought to identify and explain why working-class children are 'diverted' away from university education. They conclude that these students are likely to favour vocational training over education at university as a result of their personallysubjective evaluation of their prior educational performance, the probability of success at university, and the anticipated costs of higher education. These (workingclass) students were found to be more likely to over-estimate the costs and to underestimate their prospects of success in university education. The authors also claimed that intergenerational status maintenance plays a role in socio-economic differences in educational decision-making, since for working-class students, university studies are not necessary for maintaining their status. Together, this suggests that students who are less or narrowly informed about higher education are those who might be drawn to consider vocational education.

A lack of certainty by young people about occupations beyond schooling has been shown to impact decisions about post-school pathways, particularly for those with limited educational options. Gutman and Schoon (2012) investigated whether uncertain career aspirations and associated variables mediate the link amongst socioeconomic status and prior achievement and later educational outcomes. They found that young people from low socioeconomic (SES) backgrounds and who have

lower level of academic achievement are more likely to experience uncertainty in their career aspirations. However, when accounting for parental educational expectations, perceived school ability, school motivation and useful career advice, uncertainty in career aspirations can be seen as an educational advantage, as adolescents with uncertain career aspirations had higher academic performance at age 16 and a greater likelihood of educational enrolment at age 18 compared to those with highly specific aspirations. Elsewhere, it has been shown that whereas uncertainty for students who have secured university entrance is not a problem (Sikora, 2018), as they can engage in a broadly-based degrees, uncertainty for students heading for vocational education is a problem because courses in that sector tend to be very occupationally specific (Billett et al., 2020). Hence, uncertainty about preferred occupations for a growing number of students seems to be elevating the attractiveness of higher education over vocational education.

Some literature focused on the influences on young people to make decisions about post-school pathways. Some report findings associated with socio-economic status. For instance, Oymak and Hudson (2018) drew on survey data from 9th and 11th (mid-senior) grade students to present a descriptive account of students' sources of information for: (i) education after high school and (ii) careers. Whilst cautioning they had excluded other potential factors, their research indicates factors that shape students' decisions in combination with or in addition to SES measures, such as students' post-high school intentions and race/ethnicity, make little difference in the overall pattern of influences on decision-making across SES backgrounds. Students from high-, middle-, and low-SES backgrounds most often reported family members and/or themselves as their main influences in decisionmaking about both education and careers. There were differences, however, in the relative emphasis students from different SES groups placed on each source of information. Oymak and Hudson (2018) report that, generally, higher SES students, more often than lower SES students, reported family members or students themselves as their main influence, while lower SES students more often than higher SES students reported teachers or counsellors as their main influence. That is, as also indicated elsewhere, some parents are more influential and others, as well as being more informed, in ways referred to elsewhere as cultural capital (Bourdieu, 1986). That is, the level of being informed about, engaging in and influential in that decision-making differed across SES factors.

Noteworthy here is the GOETE study that gathered survey data from lower secondary students, attending affluent, average and disadvantaged schools, followed by interviews with students only from disadvantaged schools at the commencement of their upper secondary education (Cuconato, 2017). Analyses of the survey data indicate that even in lower secondary education, the socio-economic background of the family shapes the scope and kinds of educational experiences these students would select. For instance, students from disadvantaged backgrounds are more likely to experience unexpected school changes whilst having lower expectations regarding future destinations and choices than counterparts from higher socio-economic groupings (Lamb et al. 2018). So, just as Australian studies cautioned against treating low SES students as a homogenous group (Gore et al. 2015b), the GOETE study

emphasised that the trajectories of students labelled as disadvantaged in terms of social background, gender or ethnicity vary considerably (Cuconato, 2017). That is, the 'structured choices' students make are influenced by macro-level factors, such as education and training opportunities and available support measures; at the mesolevel by how national policies are implemented in particular institutions; and at the micro-level by the direct interaction between young people and significant others (e.g. parents) and/or institutional actors (e.g. teachers and guidance counsellors) and their subjective experiences, orientations and motivational careers (Walther et al., 2015). Hence, the claim here is that interactions between institutional factors and individuals' preferences are suggestions that shape this decision-making in ways shapes by a common social superstructure but are differentiated in how individuals engage with and utilise these suggestion. However, these findings fail to explain why there is a growing disaffection with vocational education by those making postschool choices. These findings, however, serve only to underline the 'complex of factors' and their interactions regarding post-school decisions. They also suggest that institutional factors are mediated proximally and by others as well as young people.

Some Australian studies have drawn on data from the Longitudinal Surveys of Australian Youth (LSAY) to examine the effect of socioeconomic status (SES) on aspects of decision-making (Gemici, et al., 2014; Homel & Ryan, 2014; Rothman & Hillman, 2008; Sikora, 2018; Tomaszewski et al., 2017). SES is operationalised in LSAY datasets by a summary measure that combines information about parental occupation, parental education, and access to educational and cultural resources. In the studies examining inputs to the decision-making process, the general tendency was to find, again, that while SES was often a statistically significant variable in the relationships under investigation, the relative importance of its influence was small in comparison to other variables:

- 1. SES had a significant influence on students' perception of the usefulness of career advice they received in Years 10–12 (i.e. senior high school), but it explained less than one per cent of the variation in usefulness scores (Rothman & Hillman, 2008).
- 2. SES had a relatively small impact on students' aspirations (e.g. plans to complete Year 12, plans to go to university, what sort of occupation students expect to have at age 30) (Gemici et al., 2014). Homel and Ryan (2014) similarly found that there appeared to be no consistent interaction between aspirations and SES. Like the LSAY results, a survey of primary and early secondary students found relatively small differences between SES background and occupational aspirations (Gore, et al., 2015b).
- 3. Only a weak correlation was found between lower socioeconomic backgrounds and occupational uncertainty (operationalised through answers to questions about expected occupations that lack precision) (Sikora, 2018).

Regardless of these findings, Tomaszewski et al. (2017) claim that young people from low-socio-economic backgrounds were less likely to enrol in university than those from higher socio-economic backgrounds. However, amongst young people

from low socio-economic backgrounds, they report positive student-teacher relations and talks by school career advisors were found to be more conducive to subsequent university enrolment than participation in vocational education. Certainly, programs of vocational education and training (VET) in Australian schools are over-represented by students from low socio-economic backgrounds (Clarke & Polesel, 2013). While this might be the case, none of this should be seen as deterministic. Indeed, Krause et al. (2009) identified a 'myriad of reasons' why students from low SES backgrounds successfully participate and progress in higher education, noting that 'no single factor operates in isolation' (p. 6). Similarly, in seeking to understand how young people living in neighbourhoods of socioeconomic disadvantage make decisions about their educational and work futures, Webb, et al. (2015) claim that SES does not work in isolation, with different outcomes for young men and young women. Indeed, SES has been found to intersect with other factors (i.e., gender and prior achievement) in influencing students' decision about postschool pathways (Gore et al., 2015b). They concluded that initiatives to support the participation of students from low SES backgrounds need to recognise that the category of 'low SES' is not homogenous.

All of this suggests that correlations between students' socio-economic status and decision-making about post-school pathways alone are insufficient factors, but instead it is how more proximal factors (i.e., those close by – e.g., parents and teachers) and the young people themselves mediate those factors and decision-making progresses. Hence, beyond these institutional facts (Searle, 1995): those suggested by social suggestions, individuals also mediate this decision-making.

Students' Educational Experiences and Achievement

Given that young people mediate the advice and suggestions provided by societal sources, it is necessary to elaborate the personal factors. Given the importance of educational achievement in shaping the post-school options available to young people beyond schooling, is not surprising that their personal experience of schooling and their achievement within it will shape students' decision-making, and how their schools respond and provide advice to them. Students expressing an interest in the VET sector (as an educational pathway or means to an occupational destination) were more likely to have lower prior achievement and a lower sense of their relative academic performance (Gore et al., 2017). Earlier, Gore et al. (2015a) reported complementary findings. They found that students with high prior achievement were more likely to indicate an intention to go to university than students with low prior achievement. Academic performance was found to be an influential factor in students' aspirations for completing Year 12 and a strong predictor of occupational aspirations (Gemici et al., 2014), thereby shaping the perceptions about what is possible for them to achieve and what pathways they might consider.

These perceptions are quite powerful and can shape the parameters or scope of young people's beliefs and aspirations (Billett, 2014). Galliott and Graham (2015)

and Galliott et al. (2015) examined the impact of young people's educational experiences on career choice 'capability'. The first study found that Year 9–12 (i.e. mid to senior high school) students who were uncertain of their future career plans were more likely to hold negative attitudes towards school. Career 'uncertain' students were also less likely to be satisfied with the elective subjects offered at their school and reported less access to career education sessions. The second study (Galliott et al., 2015) found that students who have not decided their post-school careers ranked their current academic, problem-solving and goal-orientation abilities lower than their career certain peers. In this way, there is interplay between experiences and achievement in schools and the kinds and scope of post-school pathways that students believe are open to them and they might be intended to pursue. The scope of what is possible is also informed by the knowledge about post-school educational pathways and the kinds of potential occupations or careers that these young people are aware of and the occupations they might like to pursue.

Particularly challenging for policy makers and strategists alike is Gore et al.'s (2017, p. 3) conclusion that students who choose VET and VET-related occupations were 'most likely to be characterised by one or more of the following: male, English-speaking background, from more disadvantaged backgrounds, and see themselves as average or below in academic ability compared with their peers'. Such a finding illustrates the complexity of the factors influencing school students' educational choices, but at the same time identifies the sorts of elements that need to be addressed in any interventions.

In these ways, individual students' capacities, experiences and their engagement with schools all shape the decisions they make, and as more students increasingly compete senior schooling there may be an inevitable press for them to engage in the highest level of post-school education that their investment in extended schooling can secure. This has led to the elevation of aspirations to identify 'what is possible' in post-school pathways.

Knowledge About VET/Careers/Occupations

There is a growing emphasis on informing high school students about post-school pathways in many schooling systems. Yet, it is important to understand the processes and outcomes of these processes. Sometimes, this emphasis is on selecting courses for the seniors of schooling and, in other instances it is a process that deliberately seeks to assist in forming and making decisions that has implications beyond the senior schooling years. Nevertheless, it seems that school students are not well-informed when making decisions about subject selection and the pathways available to them at secondary school (Dalley-Trim et al., 2008). Even then, the decision-making may not be particularly focused. These researchers found that the three main reasons given for choosing to do VET subjects were that they were: (i) 'fun', 'enjoyable' subjects; (ii) that the qualifications and vocational experience obtained were a link to post-school pathways and employment, providing a 'head start' for

some and a 'back up' for others, and (iii) that they offered a 'change of pace' from more intellectually demanding school subjects. The first and third views were problematic and contributing to negative perceptions of VET (i.e., that it is only an option for less academically-inclined students). Gore et al. (2017) also found that many Australian students lacked clear, accurate and contemporary information about the vocational education sector. They suggested that schools and/or VET providers recruit a more diverse range of students and to ensure that students and their parents/carers have a greater awareness of available vocational pathways and destinations. Students' conceptions of those pathways and their destinations are a central factor.

Creed et al. (2010) compared the career development of work-bound and VETbound students, relative to university-bound students. They found significant differences between the work-bound and university-bound students on career exploration, knowledge of the world of work, knowledge and use of decision-making principles, and career indecision. Significant differences were also found between work-bound and VET-bound students' knowledge of the world of work. There were significant differences between VET-bound and university-bound students on knowledge and use of decision-making principles. Work-bound students were reported as being the poorest prepared, that may have resulted from a career-education-in-their-schools focussing on higher education pathways at the expense of those focussing on work and VET. Thus, work-bound students may be making occupational decisions based on insufficient career information, a poor understanding of how labour markets operate, and with poor decision-making skills. The results suggest a need to make relevant career information and training available to those students contemplating an early end to their education so they can become better informed and more skilled in planning their occupational futures. Analogously, Hawkins (2017) described rural girls' barriers to higher education options in terms of the lack of "cultural capacity, navigational capacity and 'hot knowledge' to fulfil these aspirations." (p. 50) That is they suffered from geographical constraints referred to earlier: lack of engagement with those who were well informed about various post-school options and pathways, were isolated in terms of their ability to sift through and engage with advice and information in an informed way and were unaware of specific knowledge about how to maximise school score and profiles to their advantage.

Gaylor and Nicol (2016) evaluated an experiential career exploration program by examining Grade 11 and 12 (i.e., senior high) students' motivation and career decision-making self-efficacy. They found that most participants in this program were already intrinsically-motivated about career exploration, but that many of them had concerns about making difficult and seemingly fixed expectations about their future careers. While they also found a positive relationship between program completion and career decision-making self-efficacy, they proposed improvements including to customise the class by surveying students to identify knowledge gaps and areas of most interest to them.

As with some parents, Australian students were reported as often having outdated perceptions of the vocational education sector (Gore et al., 2017). They also reported students tending to form an early but largely uninformed view that

university is preferable to vocational education as a post-school destination, a conclusion also confirmed by Hargreaves and Osborne (2017). These findings suggest that providing positive views of VET is warranted earlier in their schooling than in mid/senior high school. Students were also sometimes confused and even unrealistic about the educational requirements for VET-related occupations (Hargreaves and Osborne, 2017; Gore et al., 2017). Hargreaves and Osborne (2017) found that students were motivated by both structured and ad hoc opportunities to experience VET-related occupations, and that gender stereotypes continued to be a strong influence on career choice.

In these ways, the students' socio-economic status, their educational achievement and experiences, and knowledge that they have about post-school options, be it provided through intentional or unintentional suggestions at school or from parents, mediated their decision-making about post-school pathways. As such these complex factors, stand as key factors in their decisions about, pathways and degree by which the decision-making is well-informed.

Students' Decision-Making About Post-School Pathways

In this review, the aim has been to understand the complex of factors and practices informing decision-making processes of young people about post-school pathways. The key motivation was concern about the growing number of young people who are not considering or engaging with vocational education pathways as a viable and worthwhile post-school pathway. The consequences are that increasing numbers of young people are engaging in higher education courses and that this is having a deleterious effect upon vocational education and the occupations it serves (Billett, 2014). It can generate extended and circuitous post-school pathways for young people. Central here is that the seemingly more open and flexible options afforded by universities may not lead to employable outcomes. Yet, it is unclear whether the decision-making by these young people is wholly informed and helpful. Indeed, the changing preference to engage in higher education, rather than vocational education seems to be a product of a range of broad social factors but, manifested by the practices that occur within schools, families and interactions with familiars (e.g., friends). For instance, institutional practices such as greater retention in and completion of the senior schooling and the provision of career guidance and measure to manage post-school pathways may be leading to enhanced expectations that are manifested in choices about higher education. Of course, there is nothing wrong with indecision and high aspiration.

All that is being suggested here is that the exercise of aspiration in decision-making needs to progress on a basis of identifying what the young person is suited to and that these aspiration need to be informed and as non-prejudicial as possible so that the choices are based on consideration of the range of options (UNESCO-UNEVOC, 2018). With a greater percentage of the adult population having high levels of education this may be translated into expectations that their children will

S. Billett et al.

go on to ever higher levels of education and this is what is required to secure clean, stable and worthwhile work. At the same time, there is evidence that parents of low SES students may have limited knowledge and levels of engagement in career directions (Gore et al., 2017). Then, there is the almost universal phenomena of schooling being extended into the senior years and with that engaging a greater percentage of students in programs which are inherently directed towards university entrance. Added to this are the seeming growing aspirations of young people and preference for stable, clean and high-status work that is seen as a product of a university education, more than that of vocational education. Within all of this are differences associated with how social suggestions play out because students mediate these differences.

There are clear differences between the practices of parents who are informed, engaged and influential in securing university entrance for their children, as opposed to those who are less informed, engaged, and have lower expectations of post-school pathways. So, there is an intertwining of the practices of parents, teachers, career guidance officers and young people who are interacting with institutional societal factors and that this interaction is shaping their decisions about post-school pathways.

What has been proposed here is that there is an intertwining between sets of institutional factors and the practices of people who have an influence upon the decision-making of young people about postschool pathways. There is insufficient evidence to suggest that there are strong social determinants operating alone. Instead, it is the interplay between societal factors and personal practices that lead to decision-making, and it is these that collectively are shaping preferences away from participating in VET and the occupations it serves. While this is seemingly a vague and unsatisfactory conclusion, it points to how a more informed, engaged and focused process of decision making might occur. That is, through engaging with, supporting, informing and assisting the practices of decision-making by parents and young people. Identifying practices also brings to bear a consideration of the practices of others, including teachers and career guidance officers who can mediate these processes. That is, to be intentionally more objective, informed and balanced in their discussions with students, and to try and reach out and find ways of informing parents more about post-school options.

References

Aarkrog, V. (2020). The standing and status of vocational education and training in Denmark. *Journal of Vocational Education and Training*, 72(2), 170–188.

Australian Government Productivity Commission. (2017). Shifting the dial: 5-year productivity review. Retrieved from: www.pc.gov.au/inquiries/completed/productivity-review/report

Aypay, A. (2003). The tough choice at high school door: An investigation of the factors that lead students to general or vocational schools. *International Journal of Educational Development*, 23(5), 517–527.

- Baxter, J. (2017). Chapter 2: The career aspirations of young adolescent boys and girls. In Australian Institute of Family Studies (Ed.), *The longitudinal study of Australian children annual statistical report 2016*. AIFS.
- Becker, R., & Hecken, A. E. (2009). Why are working-class children diverted from universities? An empirical assessment of the diversion thesis. *European Sociological Review*, 25(2), 233–250.
- Bedson, L., & Perkins, D. (2006). A positive influence: Equipping parents to support young people's career transitions. Brotherhood of St Laurence.
- Billett, S. (2009). Personal epistemologies, work and learning. Educational Research Review, 4, 210–219.
- Billett, S. (2011). Vocational education: Purposes, traditions and prospects. Springer.
- Billett, S. (2014). The standing of vocational education: Sources of its societal esteem and implications for its enactment. *Journal of Vocational Education and Training*, 66(1), 1–21.
- Billett, S. (2020). Perspectives on enhancing the status of vocational education and the occupations it serves. *Journal of Vocational Education and Training*, 72(2), 161–169.
- Billett, S., Choy, S., & Hodge, S. (2020). Enhancing the standing of vocational education and the occupations it serves: Australia. *Journal of Vocational Education and Training*, 72(2), 270–296.
- Bisson, R., & Stubley, W. (2017). After the ATAR: Understanding how Gen Z transition into further education and employment. Year13. Retrieved from https://youthsense.com.au/research
- Bourdieu, P. (1986). The forms of capital. In G. Richardson (Ed.), *Handbook of theory and research for the sociology of education* (pp. 241–258). Greenwood Press.
- Bowen, G., & Kidd, E. (2017). Career guidance: The missing link in school to work transitions. Youth Action.
- Bowles, T. V., & Brindle, K. A. (2017). If ego identity is the envelope then adaptive change is the note to self: Scaffolding the career choices of adolescents. *International Journal for Educational and Vocational Guidance*, 17(1), 5–18.
- Bowman, D., Borlagdan, J., & Bond, S. (2015). *Making sense of youth transitions from education to work*. Brotherhood of St Laurence.
- Bradley, D., Noonan, P., Nugent, H., & Scales, B. (2008). Review of Australian higher education: Final report. DEEWR.
- Brown, J. (2017). In their words: Student choice in training markets Victorian examples. NCVER. Cedefop. (2014). Attractiveness of initial vocational education and training: Identifying what matters (Cedefop Research Paper No. 39). Publications Office of the European Union. Retrieved from https://www.cedefop.europa.eu/files/5539_en.pdf
- Cedefop. (2017). European public opinion survey on vocational education and training (p. 62).
 Publications Office of the European Union. Cedefop Research Paper No. https://doi.org/10.2801/264585
- Chesters, J. (2015). Pathways through secondary school in a comprehensive system: Does parental education and school attended affect students' choice? *International Journal of Training Research*, 13(3), 231–245.
- Chesters, J. (2018). Educational trajectories: Parental education, pathways through senior secondary college and post-school outcomes in the Australian Capital Territory, Australia. International Journal of Training Research, 16(1), 19–33.
- Clarke, K. (2015). Careers education must be for all, not just those going to university. [online] *The Conversation*. Retrieved from: https://theconversation.com/careers-education-must-be-for-all-not-just-those-going-to-university-49217
- Clarke, K., & Polesel, J. (2013). Strong on retention, weak on outcomes: The impact of vocational education and training in schools. *Discourse: Studies in the Cultural Politics of Education*, 34(2), 259–273.
- Clement, U. (2014). Improving the image of technical and vocational education and training. Federal Ministry for Economic Co-operation and Development. Retrieved from https://www.dcdualvet.org/wp-content/uploads/2014_GIZ_Improving-the-Image-of-Technical-and-Vocational-Education-and-Training_A-synthesis.pdf
- Crawford, M. B. (2000). Shop class as soulcraft. Penguin Press.

- Creed, P. A., Patton, W., & Hood, M. (2010). Career development and personal functioning differences between work-bound and non-work bound students. *Journal of Vocational Behavior*, 76(1), 37–41.
- Cuconato, M. (2017). School to work transitions in Europe: Choice and constraints. *Educational Research for Policy and Practice*, 16(1), 43–59.
- Dalley-Trim, L., & Alloway, N. (2010). Looking "outward and onward" in the outback: Regional Australian students' aspirations and expectations for their future as framed by dominant discourses of further education and training. *The Australian Educational Researcher*, 37(2), 107–125.
- Dalley-Trim, L., Alloway, N., & Walker, K. (2008). Secondary school students' perceptions of, and the factors influencing their decision-making in relation to, VET in schools. *The Australian Educational Researcher*, 35(2), 55–69.
- Deissinger, T. (2005). Links between vocational education and training (VET) and higher education: The case of Germany. In J. Gallacher & M. Osborne (Eds.), *A contested landscape: International perspectives on diversity in mass higher education* (pp. 92–107). NIACE.
- Deissinger, T., & Ott, M. (2016). Tertiarisation of vocational education and training and its implications Problems and issues in Germany and France. In S. Bohlinger, T. K. A. Dang, & M. Klatt (Eds.), Education policy: Mapping the landscape of scope (pp. 268–296). Peter Lang. https://doi.org/10.3726/978-3-653-05044-8
- Dewey, J. (1916). Democracy and education. The Free Press.

134

- Fowler, C. (2017). The Boundaries and connections between the VET and higher education sectors: "Confused, contested and collaborative" (Occasional paper). NCVER.
- Fuller, C., McCrum, E., & Macfadyen, T. (2014). Teachers' knowledge and experiences of information advice and guidance: Some implications for the current policy context in England. *Education Inquiry*, 5(22).
- Galliott, N. (2017). Online career guidance: Does knowledge equate to power for high school students? *Journal of Psychologists and Counsellors in Schools*, 27(2), 190–207.
- Galliott, N., & Graham, L. J. (2015). School based experiences as contributors to career decision-making: Findings from a cross-sectional survey of high-school students. *The Australian Educational Researcher*, 42(2), 179–199.
- Galliott, N., Graham, L. J., & Sweller, N. (2015). Who struggles most in making a career choice and why? Findings from a cross-sectional survey of Australian high-school students. *Journal* of Psychologists and Counsellors in Schools, 25(2), 133–151.
- Gaylor, L., & Nicol, J. J. (2016). Experiential high school career education, self-efficacy, and motivation. *Canadian Journal of Education*, 39(2).
- Gemici, S., Bednarz, A., Karmel, T., & Lim, P. (2014). The factors affecting the educational and occupational aspirations of young Australians. NCVER.
- Ginevra, M. C., Nota, L., & Ferrari, L. (2015). Parental support in adolescents' career development: Parents' and children's perceptions. *The Career Development Quarterly*, 63(1), 2–15.
- Gore, J., Ellis, H., Fray, L., Smith, M., Lloyd, A., Berrigan, C., Lyell, A., Weaver, N., & Holmes, K. (2017). Choosing VET: Investigating the VET aspirations of school students. NCVER.
- Gore, J., Holmes, K., Smith, M., Lyell, A., Ellis, H., & Fray, L. (2015a). Choosing university: The impact of schools and schooling. Final report to the National Centre for Student Equity in Higher Education. University of Newcastle.
- Gore, J., Holmes, K., Smith, M., Southgate, E., & Albright, J. (2015b). Socioeconomic status and the career aspirations of Australian school students: Testing enduring assumptions. *The Australian Educational Researcher*, 42(2), 155–177.
- Gutman, L. M., & Schoon, I. (2012). Correlates and consequences of uncertainty in career aspirations: Gender differences among adolescents in England. *Journal of Vocational Behavior*, 80(3), 608–618.
- Hargreaves, J., & Osborne, K. (2017). Choosing VET: Aspirations, intention and choice. NCVER. Hawkins, C. (2014). The Graduate, the Globetrotter and the Good Samaritan: Adolescent girls' visions of themselves in early adulthood. The Australian Educational Researcher, 41(5), 565–583.

- Hawkins, C.-L. (2017). Do aspirations really matter? *Australian & International Journal of Rural Education*, 27(3).
- Haybi-Barak, M., & Shoshana, A. (2020). Separatist biopolitics: The dual discourse of the vocational education policy in Israel. *Journal of Vocational Education and Training*, 72(2), 297–314.
- Haywood, H., & Scullion, R. (2018). 'It's quite difficult letting them go, isn't it?' UK parents' experiences of their child's higher education choice process. *Studies in Higher Education*, 43(12), 2161–2175.
- Hiim, H. (2020). The quality and standing of school-based Norwegian VET. *Journal of Vocational Education and Training*, 72(2), 228–249.
- Hlado, P., & Ježek, S. (2018). Measurement of career-specific parental behaviors perceived by Czech adolescents. *Studia Paedagogica*, 23(2), 101–135.
- Homel, J., & Ryan, C. (2014). Educational outcomes: The impact of aspirations and the role of student background characteristics. NCVER.
- Krause, K.-L., Vick, M., Boon, H., Bland, D. C., & Clark, J.-A. (2009). A fair go beyond the school gate? Systemic factors affecting participation and attainment in tertiary education by Queensland students from LSES backgrounds. Queensland Department of Education and Training.
- Lamb, S., Maire, Q., Walstab, A., Newman, G., Doecke, E., & Davies, M. (2018). Improving participation and success in VET for disadvantaged learners. Research report, National Centre for Vocational Education Research (NCVER).
- Lasonen, J., & Manning, S. (2000). How to improve the standing of vocational compared to general education. A collaborative investigation of strategies and qualifications across Europe. Training in Europe. Second Report on vocational training research in Europe.
- Lidström, L., Holm, A. S., & Lundström, U. (2014). Maximising opportunity and minimising risk? Young people's upper secondary school choices in Swedish quasi-markets. *Young*, 22(1), 1–20.
- Martínez-Morales, I., & Marhuenda-Fluixá, F. (2020). Vocational education and training in Spain: Steady improvement and increasing value. *Journal of Vocational Education and Training*, 72(2), 209–227.
- Maxwell, G., Cooper, M., & Biggs, N. (2000). How people choose vocational education and training programs: Social, educational and personal influences on aspiration. NCVER.
- McIlveen, P., Morgan, T., & Bimrose, J. (2012). A longitudinal study of the experience of a career development program for rural school students. *Australian Journal of Career Development*, 21(1), 22–30.
- Nägele, C., & Stalder, B. E. (2018). Trends in vocational education and training research. Proceedings of the European Conference on Educational Research (ECER), Vocational Education and Training Network (VETNET). Paper presented at the Proceedings of the European Conference on Educational Research (ECER), Bolzano.
- Noonan, P., & Pilcher, S. (2018). *Participation in tertiary education in Australia: Modelling and scenario analysis.* Mitchell Institute, Victoria University.
- Organisation for Economic Co-operation and Development. (1996). The knowledge-based economy. OECD.
- Oymak, C., & Hudson, L. (2018). *High School Students' Views on Who Influences Their Thinking about Education and Careers* (Stats in Brief. NCES 2018-088). U.S. Department of Education, National Center for Education Statistics.
- Parliament of Victoria Economic, Education, Jobs and Skills Committee. (2018). *Inquiry into career advice activities in Victorian schools*. Retrieved from https://www.parliament.vic.gov.au/images/stories/committees/eejsc/Career_Advice_Activities/EEJSC_58-04_Text_WEB.pdf
- Phillips, M. (2012). Why Should We Care About Vocational Education? Edutopia. Retrieved from: www.edutopia.org/blog/vocational-education-benefits-mark-phillips
- Pilcher, S., & Torii, K. (2018). Crunching the number: Exploring the use and usefulness of the Australian Tertiary Admission Rank (ATAR) (Mitchell Institute paper No. 01/2018). Mitchell Institute, Victoria University.

- Rainey, L., Rainey, L. M., Simons, M., Pudney, V., Pudney, V. A., & Hughes, E. (2008). What choice? An evaluation of career development services for young people. NCVER.
- Rintala, H., & Nokelainen, P. (2020). Standing and attractiveness of vocational education and training in Finland: Focus on learning environments. *Journal of Vocational Education and Training*, 72(2), 250–269.
- Rose, M. (2004). The mind at work: Valuing the intelligence of the American worker. Viking Press. Rothman, S., & Hillman, K. (2008). Career advice in Australian secondary schools: Use and usefulness (LSAY research reports, no. 53). ACER.
- Searle, J. R. (1995). The construction of social reality. Penguin.
- Sennett, R. (2008). The craftsman. Yale University Press.

136

- Sikora, J. (2018). Aimless or flexible? Does uncertainty in adolescent occupational expectations matter in young adulthood? *Australian Journal of Education*, 62(2), 154–168.
- Snowden, C., & Lewis, S. (2015). Mixed messages: Public communication about higher education and non-traditional students in Australia. *Higher Education*, 70(3), 585–599.
- Stalder, B. E., & Lüthi, F. (2020). Job resources and career success of IVET graduates in Switzerland: A different approach to exploring the standing of VET. *Journal of Vocational Education and Training*, 72(2), 189–208.
- Tomaszewski, W., Perales, F., & Xiang, N. (2017). School experiences, career guidance, and the university participation of young people from three equity groups in Australia. National Centre for Student Equity in Higher Education (NCSEHE), Curtin University.
- Torii, K., & O'Connell, M. (2017). *Preparing young people for the future of work* (Mitchell Institute policy paper no. 01/2017). Mitchell Institute, Victoria University.
- Ule, M., Živoder, A., & du Bois-Reymond, M. (2015). 'Simply the best for my children': Patterns of parental involvement in education. *International Journal of Qualitative Studies in Education*, 28(3), 329–348.
- UNESCO. (2018). Work-based learning programmes for young people in the Arab region: A comparative and longitudinal analysis A synthesis report. Retrieved from Beurit: https://unevoc.unesco.org/up/vc_synthesis_21.pdf
- UNESCO-UNEVOC. (2018). Short summary of the Virtual Conference on improving the image of TVET: Making TVET attractive to youth. Retrieved from https://vocationsandlearning.files. wordpress.com/2019/10/vc_synthesis_21_final.pdf
- Universities Australia. (2008). A National Internship Scheme: Enhancing the skills and work-readiness of Australian university graduates (Universities Australia position paper no. 3/08). Universities Australia.
- Webb, S., Black, R., Morton, R., Plowright, S., & Roy, R. (2015). Geographical and place dimensions of post-school participation in education and work. NCVER.
- Walther, A., Warth, A., Ule, M., & du Bois-Reymond, M. (2015). 'Me, my education and I': Constellations of decision-making in young people's educational trajectories. *International Journal of Qualitative Studies in Education*, 28(3), 349–371.
- Wolf, A. (2011). *Review of vocational education: The Wolf report.* Department of Education. Retrieved from www.education.gov.uk/publications/eOrderingDownload/The%20Wolf%20 Report.pdf
- Wolf, A., Dominguez-Reig, G., & Sellen, P. (2016). Remaking tertiary education: Can we create a system that is fair and fit for purpose? Education Policy Institute. Retrieved from: http://epi.org.uk/report/remaking-tertiary-education-can-we-create-a-system-that-is-fair-and-fit-for-purpose/#
- Wyman, N., McCrindle, M., Whatmore, S., Gedge, J., & Edwards, T. (2017). *Perceptions are not reality: Myths, realities & the critical role of vocational education & training in Australia*. Skilling Australia Foundation.

Part III Country Studies of the Standing of Vocational Education and the Occupations It Serves

Chapter 7 Alternance Training as a Way to Improve the Attractivity of Vocational Education Programmes in France



Laurent Veillard

Abstract During the twentieth century, France progressively set up and generalised a predominantly school-based vocational education system, meaning that most young people were trained in schools and separately from workplaces. This approach did not seem to pose any problems during the period of strong economic growth in the post-war period. However, it encountered increasing difficulties from the end of the 1970s onwards, with the first economic crises leading to high youth unemployment. In the difficult economic periods that followed, employers often complained about the fact that education was too disciplinary and failed to adequately prepare graduates to engage effectively in work situations Secondary vocational education was also being drained of its brightest pupils, with education policies encouraging young people to engage in studies that provide direct access to and higher chances of success in higher education. As a result of this 'diploma inflation' or 'credential creep' process, esteem deteriorated considerably towards both secondary vocational training programmes and the trades accessible via diplomas specific to this field of education. Pupils in these courses are increasingly those who failed in general educational courses, thereby making vocational education a second-class education choice. To address the politically explosive issue of the lack of engagement among a significant proportion of young people, public authorities have sought to make vocational education more effective in terms of labour market integration and of greater prestige among young people. Among these means, 'alternance training', understood as a pedagogical method combining periods of training in school and periods of training in the workplace has emerged. This is seen as a way to improve the credibility of training courses with employers and enhance their attractiveness for young people. Various measures have been taken over the last 20 years to promote alternance training in vocational education. But several studies

L. Veillard (⊠) Institut Agro Dijon, Paris, France

Research Unit FoAP (Formation et Apprentissages Professionnels), Paris, France e-mail: laurent.veillard@agrosupdijon.fr, URL: https://institut-agro-dijon.com/; https://foap.cnam.fr/

show that these measures have not really improved the attractivity and prestige of secondary vocational training but benefit higher education courses much more.

Keywords Vocational education and training · France · School-based system · Alternance training · VET attractivity · Parity of esteem · VET policy · History of vocational education · Vocationalisation of higher education · Workplace learning

Introduction

According to several studies, Vocational Education in France is predominantly a school-based system (Gonon, 2008; Greinert, 2004; Prost, 1992; Troger & Brucy, 2000). This term means two things: (i) the training of young people mainly takes place in schools separated from the workplace; and (ii) the State, especially the Ministry of National Education, is the main organiser of this training system. Employers are only partners. They can open their doors for internships or participate as occasional teachers to explain the realities of work and workplace performance.

While the term 'school-based' was relevant to describe the VET system established after the Second World War, it is less appropriate to describe its developments for the last 30 years, due to the significant development of alternance training courses. This type of training programme consists of alternating regularly, at variable time intervals (e.g. every week, every 2 weeks or every month), periods of training in a school and periods of supervised workplace learning. This pedagogical organisation of vocational training has been strongly encouraged by successive governments since the 1990s. According to public authorities (whether right-wing or left-wing), alternance training is the way to improve both the effectiveness and attractiveness of vocational courses. It is supposed to have many advantages: greater attractiveness of training courses for young people and their families; greater integration of graduates; greater correspondence between training courses and employers 'needs.

This chapter seeks to explain (Parts 1 and 2) some aspects of the history of the French VET system since the industrial revolution. This historical perspective helps to understand the rationale for the school-based vocational education system that was fully established after the Second World War. During this immediate post-war period, vocational education was relatively attractive to part of the French population, especially children from the working classes. Then, part 3 shows how the educational policies since the 1960s, aiming to raise the academic level of all pupils and to favour their access to higher education, have contributed to the transformation of vocational education into a relegation pathway for pupils with academic difficulties. In the following section (Part 4), I describe how the school-based model came under increasing criticism, especially from employers, when the first economic crises occurred in the 1970s and youth unemployment soared. Instead of this school-based model, the successive governments favoured a so-called alternance training model.

This type of pedagogical approach was implemented mainly through the reform and development of apprenticeship, which became a new reference for public authorities instead of the school-based model. However, we shall see (Part 5) that this type of approach has not really raised the prestige of secondary vocational courses, because of the choice to develop apprenticeship at all levels of training, including higher education.

Priority to the Training of Elites in Vocational Schools (1815–1939)

Like several other European countries, the French public authorities addressed the issue of vocational training rather late (Pelpel & Troger, 2001; Lembré, 2016; Veillard, 2017). Setting up specific institutions to train the workforce was required because of the upheavals in production methods brought about by the industrial revolution, but it only became really pressing in the middle of the nineteenth century. At that time, the French State became aware of the UK's lead in the economic, political and military competition between the major European nations. Until then, the State had limited action with respect to vocational education. It created only a limited number of schools to train a highly qualified workforce in a few strategic fields for the nation (i.e. military, architecture, civil engineering, mining, arts and crafts, etc.). In a still overwhelmingly rural country, most young people learnt their future professional occupation (e.g. agriculture or craft) on the job, by working alongside adults and gradually participating in the production activities of the family-run enterprise (Lebrun et al., 1981). Some, however, were engaged in a more codified apprenticeship, under the authority of a 'master' or qualified worker, particularly in craft sectors where trade guilds and companion societies were historically established (Charlot & Figeat, 1988; De Munck et al., 2007).

These few vocational training institutions were found to be insufficient when industry developed in France, especially during the second half of the nineteenth and the beginning of the twentieth centuries. The new modes of industrial production had generated a lot of unskilled jobs, but they also required skilled and even highly skilled personnel. For example, France sorely lacked engineers capable of mobilising scientific and technical discoveries to design new products and create the technical devices to produce them on a large scale. There was also a lack of commercial and managerial staff as well as skilled workers able to adjust, use, and repair the new machines. This explains why the public authorities initially prioritised the training of this highly qualified personnel and neglected the training of the working class more generally. At that time, the State itself created only a few new schools. Instead, it sought to encourage local initiatives, by setting a favourable regulatory and legislative framework and by distributing subsidies. The provision of vocational training was to come primarily from local actors (e.g. companies, employers or citizens associations, religious congregations, local authorities, etc.).

At that time, there was agreement that the training process of highly qualified workers should take place in technical schools. The government considered traditional apprenticeships based on the model inherited from trade guilds as not adapted for this objective. There were two reasons for that. First, apprenticeship had been in crisis for many years, particularly following the abolition of the guilds (1791) during the French Revolution. This abolition had not only prevented any association and agreement between employers or workers, but also greatly weakened the apprenticeship training system, which was a central part of these guilds or workers' organisations. Second, learning only through work did not seem to be the appropriate way for transmitting new required knowledge based partly on science and technical and organisational innovations. One area in particular attracted attention: the practice of drawing. The demand for this skill was developing rapidly in the world of fashion, arts and crafts, public works offices and the mechanical and textile industries. Drawing, codified according to precise rules, increasingly became necessary to create buildings, objects or machine tools, and to transmit the plans to the people making them (Pelpel and Troger, 2001). It was very difficult to train people on the job to make these technical drawings. More generally, on-the-job learning was suitable for transmitting traditional practices and skills, but not well suited to prepare workers for completely new ways of producing (Greinert, 2004).

The State quickly found a sympathetic ear among the biggest industrial companies regarding this depreciation of workplace learning and the priority given to the creation of full-time vocational schools for the training of engineers, technicians, and skilled workers more generally. Conversely, crafts persons and small business operators were strongly opposed to the idea of school-based training. The two extracts below, dating from the beginning of the twentieth century, illustrate this opposition between two very different ways of considering vocational training and the very lively debates between the supporters of each position (Brucy, 2013, p.17).

Even if traditional apprenticeship were better regulated and reformed [...] it will never be as good as reasoned, methodical and comprehensive learning in a vocational school. By the force of events and the new conditions of industry, learning in vocational schools will probably be the only suitable way to prepare for the trade in the future.

Is it not by practising masonry that one learns to be a mason? Do you see a mason learn his trade in a vocational school? Surely not. Learning the trade must be done in the workplace.

The first quote is from a speech by the principal of a vocational school and the second is part of a statement by the president of the building and public works union. The school principal clearly emphasises the need for comprehensive learning, based on a rationally organised training curriculum. In his view, this is the only way to equip future professionals to deal with rapid changes in the workplace. At the opposite, the union president insists on the acquisition of very operational and situated knowledge that can only be learned in a work situation.

Throughout the nineteenth and early twentieth centuries, numerous local initiatives by employers, municipalities, philanthropic associations, and religious congregations led to the establishment of several vocational schools, particularly in the most industrialised areas (eastern and northern France, Paris region, Lyon and

Saint-Etienne areas, Alpine valleys, etc.). Nevertheless, these actors and institutions did not all have the same goals and motivations. By opening in-house schools, several large metallurgical or textile companies sought above all to train the skilled labour that they needed urgently. Religious congregations (such as the "Les Frères des écoles Chrétiennes") were more concerned with keeping working-class children away from bad adult influences and to offer them an appropriate moral and religious education. Yet, they were aware that already existing religious schools were not attractive for this population. A more suitable way was to set up vocational schools offering technical and practical content, which was more immediately useful to these future workers. Moral and religious education was added to this professional training. Other types of institution (e.g. philanthropic associations) sought to promote both vocational and general education, with the aim of preserving children from early labour. Their aim was to train both future workers and citizens, with humanist values and a desire to disseminate new knowledge. Although as a result of new laws, compulsory primary education developed considerably during the nineteenth century, not all children attended school. Even those who did attend school often stopped and were put to work at the age of 11 or 12.

These new educational institutions took on different names: apprentice schools, arts and crafts schools, schools with the name of the company or municipality that created them, farm schools in the agricultural field. At that time, an original educational space was developed within these vocational schools: the school workshop. Indeed, the choice to train people in institutions separate from the workplace required a new way of preparing future workers for the practical dimensions of their trade. School workshops were substitute professional places or hybrid systems in the sense that they combined, in the same place, objects and practices specific both to the world of work and to scholar institutions (Pelpel & Troger, 2001). Their characteristics (size of the workshop, types of technical equipment, similarity or difference with real work situations, pedagogical organization of student activities, etc.) could be very different from one training area and one school to another (Bodé, 2017). But their common aim was to enable students to gradually acquire, under the guidance of experienced forepersons or workers, a range of gestures and technical know-how specific to the trades learned. Moreover, while many schools gave more time to workshop training, some showed a desire to balance theory and practice, while others favoured a very theoretical content with the aim of preparing students to the entrance examinations of higher engineering schools.

Establishing a Complete National School-Based Vocational Training System (1940–1960)

Until the eve of the First World War, training commercial, administrative and industrial elites in vocational schools separate from work settings remained the priority of the central State. This strategy was supported by large companies, especially in the metal industry field (i.e. the most powerful one). However, political,

economic, technical and social developments subsequently led the State to move towards the establishment and building of a national and public VET system capable of training all workers, employees and craftworkers, and not only technical, managerial and commercial elites. Without going into the details of the various stages in the construction of such a system, we can nevertheless try to identify the most important factors of this building process.

While there was a general agreement on how to train professional elites – that is, almost everyone agreed that managers, engineers, architects, scientists, doctors, etc. should be trained in schools or universities because of the importance of the theoretical knowledge to be acquired – the preferred way of preparing other kinds of workers and employees gave rise to a lively debate.

Broadly speaking, there were three different positions (Pelpel & Troger, 2001):

- 1. Those in favour of modernising and generalising the apprenticeship system (i.e., craftsmen, small employers and employees' unions);
- 2. Stakeholders who wanted the labour force to be trained in vocational schools, but in a very utilitarian perspective, with curricula focused on teaching only knowledge useful for the trade (i.e. large industries and the Ministry of Industry).
- 3. Defenders of a public vocational education system, able to train skilled workers in response to the country's economic needs, but also to give them a general and technical culture that would enable them to have opportunities for social mobility and to fulfil their role as adults and citizens (i.e. Senior officials from the Ministry of Public Education and some intellectuals).

This type of debate continued into the inter-war period. In the end, the third position prevailed. Supporters of such a position consider that the State must guarantee the value of vocational training. This value should not only be judged by using economic criteria, but also through humanistic and societal values. From this choice originated an important pedagogical characteristic of secondary vocational education in France: in addition to vocational courses (both theoretical and practical), students are also taught general subjects such as French, mathematics, history and geography, science, etc.

During the same period, attempts were also made to revive and modernise the old apprenticeship system to train workers and employees. The Astier law in 1919 was the most notable of these attempts (Lembré, 2016). One measure was to set up compulsory evening courses for all young workers under the age of 18 in addition to the work-based learning that occurred during the day. This law also aimed to give greater recognition to these evening classes by giving those who attended them and passed the exams an official diploma: the CAP (Certificat d'Aptitude Professionnelle), which still exists today. However, this law had very little effect on increasing the number of apprentices, which continued to decline until the end of the twentieth century. I will return to this point later in this chapter. As an alternative, a full-time school-based system, combining vocational (i.e. both practical and theoretical) and general teaching, was developed thereafter. However, it was really established only after the Second World War (Prost, 1981) and reached its peak in the 1960s and 1970s.

During the Second World War, the collaborationist government was very concerned with the high unemployment rate among young people. In the conservative ideology of these collaborationists, work was a cardinal value and had a major function in socialising and integrating young people into society. Consequently, they decided to create a national network of public vocational schools (so called "learning centres") throughout the country to keep young people busy after they had finished compulsory school. This government also decided to take the monopoly on the issuing of diplomas, meaning that it was now necessary to have validation from the State to open a training course leading to a professional diploma.

In the immediate post-war period, there was a huge and urgent need for skilled labour to assist the reconstruction of the country. Successive governments, guided by a Keynesian consensus on the economic and social policy (i.e. the need for strong public State intervention), relied on the legacy of the collaborationist government to pursue the development of a school-based public secondary vocational training system. This was considered to be the quickest and most effective way to obtain these results, i.e. young people equipped with the general, scientific and technical knowledge necessary for a rapidly changing world of work. Here again, the country's elites, particularly among senior government officials and major employers, had a negative view of work-based learning. They regarded it as archaic and unsuited to the challenges facing the country. In addition, there was also a rejection, among some members of the government, of an apprenticeship system that, in their view, served the interests of employers too directly. This point of view was notably defended by the communists participating in the national unity government set up at the time of the Liberation and who were very involved in vocational training policy.

To support the development of these vocational schools, specific institutions were created for the training of vocational teachers (ENNA: Ecoles Normales Nationales d'Apprentissage), as well as a dedicated corps of inspectors (Pelpel & Troger, 2001). A coherent national architecture was also set up to define, in collaboration with professional and trade unions, the curricula and modes of certification of these courses and their links with the professional qualifications found in companies. All these measures contributed to the development of a vast network of public vocational schools covering all the levels of qualification needed in the country. In all: 904 learning centres dedicated to the training of skilled workers and employees; 203 technical colleges and 21 trade schools to train highly qualified professionals and local managers; 28 national vocational schools (ENP) and similar institutions for technicians. Seven national schools of Arts and Crafts (ENAM) provide training for engineers (Brucy, 2017).

For many years, these vocational schools were a separate educative entity from general secondary education, i.e. they were not under the same management and administration in the Ministry of National Education. The vocational education system had its own specific objectives, namely preparing students to certain occupations and enabling their immediate insertion into the labour market. Several historians consider this period (1945–1960) to be the golden age of vocational education in France. Indeed, the number of students continuing their education after primary school in vocational schools increased rapidly during this period: 130,000 in

1945 (i.e. 6% of young people); 442,000 in 1960 (24%). The numbers thus quadrupled in 15 years (Brucy, 2017; Pelpel & Troger, 2001).

Working-class children preferred this vocational route to general education after compulsory primary school. The teaching contents in these vocational schools enabled many of them to obtain a nationally recognised diploma (CAP) and qualified positions in companies, with interesting further career development possibilities for many. There was a sort of elite in this vocational route, made up of the best pupils from working classes. At that time, it was a very attractive vocational pathway for these categories of students.

Promoting Access for all to Post-compulsory and Higher Education (1960–1990)

This dynamic began to change in the 1960s. At that time, successive governments started to develop educational policies aimed at raising the general educational level of all pupils. In the 1960s, educational inequalities were still very high across social classes. Pupils from working class had little chance of obtaining the baccalaureate (secondary school leaving certificate required to access higher education). Activist and political voices increasingly rose to denounce this strong educative inequality and the low access of these working-class children to the most interesting (best paid and most prestigious) jobs. Several studies in social science fuelled these criticisms by giving them a scientific foundation based on statistical figures. For example, in 1960, if you were a teacher's child, you were 125 times more likely to enter higher education than a worker's child (Prost, 1981). At that time, 55% of pupils in an age group stopped their studies at the end of primary school and entered the labour market without a vocational diploma (Troger et al., 2016).

This social concern was coupled with economic preoccupations: in a more competitive and international economy, more engineers and managers were needed, as well as senior technicians, middle-level managers, and highly qualified workers. In short, it was necessary to increase the level of training of the entire workforce, in line with the human capital theory justifying the importance of investment in education to ensure the economic performance of a nation in international competition. This theory, increasingly important for the French technocratic elites from that time onwards, stipulates the particular importance of a high general education level (and not only vocational skills) for the greatest number of people to ensure that companies are able to adapt in a globalised and more competitive economy.

To increase access to upper secondary school and higher education, several measures were taken during the period 1960–1980.

The age of compulsory schooling was increased from 14 to 16 years old (1959). Then, the idea of a lower-secondary cycle of education common to all pupils gained favour and became a reality through the so-called "collège unique" in 1975. In these institutions, all pupils between the ages of 11 and 15 followed the same 4-year

education programme after primary school. The aim was to raise the level of general knowledge of all pupils. One consequence of these measures was to delay the orientation stage of pupils: whereas in the 1950s they could choose to go into vocational training at the age of 11 or 12, after 1975 they could only do so after 15 or 16. It was also at that time that the State decided to integrate vocational education into a unified secondary education system. Vocational education lost its autonomy. The general structure of the French education system as it still exists today dates from this time: compulsory schooling starts at the age of 6; compulsory primary school (duration: 5 years); 1st cycle of secondary education common to all pupils (duration: 4 years) with an orientation stage at the end of the cycle; 2nd cycle of secondary education proposing 3 tracks: general, technical (duration: 3 years) and vocational (duration: 2 years); higher education.

The technological baccalaureate was created in 1965. Until then, there were only general courses at the upper secondary level (e.g. philosophy, French/literature, maths/sciences, etc.) The aim of this new type of baccalaureate was to promote access to the upper secondary level for students who were weaker in general subjects and/or more interested in technical specialities (e.g. medical and social sciences; commercial techniques; mechanical engineering; etc.). Successful completion of this technological baccalaureate meant that they could either go to work or continue in higher education. During the same period, short tertiary training programmes in different technical and administrative fields were also created to give priority to the integration of these new technological baccalaureate holders: BTS (Brevet de Technicien Supérieur) in 1962 and DUT (Diplôme Universitaires de Technologie) in 1966. These new courses differed from existing ones in engineering schools, business schools or in universities. They were shorter (2 years), more practical and aimed at preparing students for jobs such as high-qualified technicians or middle managers. This intermediary level of qualification was increasingly needed by companies and no training solution was available before the creation of these programmes.

A third type of baccalaureate was created in 1985. This creation results from a compromise between demands from the big industry and government concerns (Troger et al., 2016). On the one hand, some employer unions, in particular the most powerful one in the metal industry branch (UIMM), deplored that the vast majority of students with a technological baccalaureate carried on with further studies in higher education, instead of entering the labour market. Companies in this sector, especially the larger ones, needed staff with greater scientific and technical knowledge to cope with the computerisation and automation of production. The emblematic vocational diploma (the 2-year CAP) was insufficient to train for this type of skill. On the other hand, the socialist government, struggling in the polls before new national elections, was looking for measures to improve its image. A major societal problem was the high rate of youth unemployment. To solve this problem, Japan was taken as an example. This country enjoyed an excellent economic situation, with a very low unemployment rate, and almost 90% of its young people completed upper secondary education. This confirmed the validity of the human capital theory. Creating a new vocational baccalaureate had several advantages. It responded to the

demands of the big industry by creating a vocational diploma of higher level than the CAP. It helped to enhance the image of vocational education through a high-valued diploma (the baccalaureate) in the education system and in the French society. Its primary purpose was to prepare students for the labour market, but at the same time, it offered the best students a possibility of further studies in higher education. Finally, it was also a way of keeping young people in school longer, and thus of rapidly reducing the youth unemployment rate (Prost, 2002).

What were the effects of these different measures? If we look at the evolution of the number of students obtaining the baccalaureate (general, technological, and vocational) and entering higher education over the period 1960–2000, we can see that they were very important. For example, in 1960, only 10% of a generation of students obtained the baccalaureate and 310,000 went on to higher education. Forty years later, about 63% had passed the baccalaureate and 2,160,000 were studying in higher education. So, the evolution of this education system was massive and rapid.

But while these successive education policies, aiming at unifying the education system, raised the general level of education of young people and democratised access to upper secondary school and higher education, it had more negative effects on the VET secondary system. Strongly encouraged to raise their educational aspirations, young people and their families, including those from working-class backgrounds, have increasingly developed strategies in order to maximise their chances of accessing long studies and the most prestigious branches of higher education. The choice of a vocational route did not appear to be the most favourable way to reach this goal given that general subject contents provided in this type of course (in literature, mathematics, science, foreign languages, etc.) are academically lower than in the general and technical paths.

As a result, vocational secondary education has been less and less able to attract good students, as was the case until the 1960s, when it was an autonomous path in the secondary education system. The vocational training programmes that suffered the most from this development were the lower diplomas (CAP), historically designed to train future blue-collar, white-collar or craft trade professionals. Secondary vocational education became an increasingly depreciated and devalued pathway, a lower status alternative for pupils who had difficulties during their schooling in primary and lower-secondary schools (Palheta, 2012). This is still largely the case today. However, a reform of the vocational baccalaureate in 2009 increased its attractivity for students (Troger & al., 2016). Before this date, students who wished to obtain this diploma had first to complete a 2-year vocational training course (CAP or BEP). The best of them could then go on to obtain a vocational baccalaureate with 2 additional years of study. The 2009 reform changed this study scheme. Since that date, students entering vocational training must immediately choose between two routes: either the CAP if they want to enter the labour market

¹As some sociologists point out, these education policies have had a powerful symbolic effect: 'In our opinion, the most important thing to remember about the 80% baccalaureate policy is its symbolic effect: it has produced, in France, a norm of long studies that is powerful, lasting and irreversible' (Beaud & Truong, 2015, p. 12)

quickly; or the vocational Baccalaureate if they plan to continue their studies in higher education. As a result, most of the students prefer to choose a vocational baccalaureate route rather than a CAP course, both due to its greater prestige and to this possibility to access higher education afterwards. Many CAP courses now concentrate the most academically disadvantaged pupils. Thus, in 2015, more than half of the students who obtained a vocational baccalaureate accessed higher education, mostly in a BTS programme (short 2-year course). This once again highlights the importance of the societal norm of long studies in France, even for a diploma that was originally created to promote integration into the labour market. It is now used more to access higher education than to prepare for the labour market.

Developing Alternance Training (1990–2018)

In the 1970s, major economic crises due to various factors (i.e. oil crisis, economic integration in the European space, globalisation of the economy, etc.) occurred. In France, they resulted in a sharp increase in unemployment. In 1973, over 300,000 people were unemployed. In 1980, there were almost 1.5 million unemployed workers. Young people, especially those with the lowest qualifications or those who had left school without qualifications, were much more affected by this phenomenon than the rest of the adult population. For example, the unemployment rate for under-25 s in 1973 was less than 5%. In 1985, it rose to over 20% (compared to 10% for the population as a whole).

From this time, there have been increasing criticisms of the school-based VET system. In particular, economic stakeholders attributed young people's difficulty to participate in the labour market to a VET system that was too far from the working realities and needs. Knowledge taught in vocational schools was considered too theoretical or too far removed from the realities of work. For companies, the costs of having to complete the training of these young people after they had graduated from vocational school were unacceptable in an increasingly competitive economic environment. For example, in February 1980, the vice-president of the CNPF (Conseil National du Patronat Français, a national body bringing together all the employers unions), proposed in a speech that bringing schools and companies closer together was the real solution to the problem of unemployment. He advocated that employers and school officials should work more together to thoroughly reform the vocational training of young people.

It was also from the 1980s onwards that a series of studies in work psychology, ergonomics and vocational didactics focused on the characteristics of professional activities in a work situation. These academic works highlighted important characteristics of working activities such as the gap between prescriptions and real work, as well as the fundamentally integrated, (non-disciplinary) situated, creative and pragmatic dimensions of knowledge used by people at work (De Montmollin, 1984; Leplat & Hoc, 1983; Pastré, 1994). Vocational knowledge involves more than the mere application of theoretical and disciplinary knowledge previously taught in

schools or training centres. It cannot be learnt without a consistent experience in a real work situation. Several researchers proposed the notion of competency to model workers' knowledge. This concept has since been widely taken up in the world of work and vocational training. It is now a central concept in the design of learning goals and curricula in vocational education and training (Maillard, 2012; Zarifian, 2001).

It became clear to many actors (i.e. policy makers, trainers, employers, HR managers) that it is no longer possible to prepare people for work only in schools, even when curricula include sessions in practical workshops. It was necessary to introduce into all curricula much more substantial time for workplace learning. This does not mean, of course, only learning trough work experience, but the development of what is called alternating training in France, i.e. the combination and complementarity of workplace learning with teaching time in a school or a training centre. In this perspective, companies are required to play a much more important role in the learning process. Consulting them to define curricula is not sufficient. They also have to play a training role by training their apprentices through work.

Two additional arguments also emerged during these years to justify the development of alternance training programmes. First, this type of VET provision, which includes a strong part of work-based learning, was supposed to enable young people who had failed at school (primary and lower secondary) to regain an interest in education and training. Secondly, alternance training was also intended to restore the standing of upper secondary vocational courses that had lost much of their attractiveness among young people and their parents. As mentioned above, with a few exceptions (i.e. some limited diplomas which still play a role in preparing an elite craft industry, for example in the manufacture of luxury goods or the restoration of historical monuments), they were training courses by default, which were available for students who had done badly at school and could not qualify for a general or technological branch. The introduction of work-linked training should help to make these vocational baccalaureate and CAP courses more attractive again, thanks to training that provides better preparation for the trades and faster integration into the labour market.

Developing alternance training was done mainly in two ways.

Firstly, work placements were added to the existing school curriculum. For example, in the early 1970s, vocational training courses such as the CAP and the professional baccalaureate did not include (or only very few) weeks of work placement. In 1979, after lengthy negotiations, the CNPF (i.e., employers union) and the Ministry of education agreed to extend work placements to all secondary school vocational training courses. Further steps were then taken to increase their duration. For example, students taking a two-year CAP course now have 14 weeks of work placement, which represents just over 30% of their total training time. Those following a 3-year vocational baccalaureate have 22 weeks (37% of total training time). In theory, schools are free to position these periods as they wish. But most often, students have 1 training period of 3 to 4 weeks per semester, the aim being to offer a curriculum alternating periods of training at school and periods of learning in a work situation.

However, the favoured way to develop alternance training was the revival of apprenticeship. In the 1970s, few students chose this type of vocational education. For instance, in 1975, there were less than 150,000 apprentices. There were several reasons for this weakness: apprenticeship hardly existed in the craft trades; this form of training concentrated pupils with academic difficulties; training was still mainly on the job, with a short teaching time at school and a low theoretical level; only one type of diploma with a low level of qualification (the CAP) was prepared, which only allowed access to low-skilled jobs; the exploitation of young people by employers was a common problem.

A major reform of apprenticeship was carried out in 1971 with three objectives:

- Improving the quality of workplace learning by regulating the apprenticeship contract between the apprentice and his or her employer
- Guaranteeing alternance training by increasing the amount of time spent in school (at least 360 hours per year)
- Ensuring better financing of the apprenticeship system by generalising a tax to be paid by all companies.

However, these measures did not have all the expected results. For example, in the mid-1980s there were still just over 212,000 apprentices. This is low compared to the number of students in school-based vocational training (around 700,000).

In 1987, there was another attempt to get apprenticeship off the ground. The right-wing government decided to extend apprenticeship to courses other than those leading to a CAP. Following this measure, it became possible to prepare a vocational baccalaureate and a short 2-year higher education course (BTS or DUT) through an apprenticeship path. In 1992, the socialist government that succeeded the previous one continued this extension process by making it possible to prepare all secondary and higher diplomas, including engineers, executives and managers, through apprenticeship. Figure 7.1 shows the current and complete organisation of the educative system in France, including the vocational route and the place of apprenticeship. The letter A means that the training course can be carried out by apprenticeship.

This extension of apprenticeship finally enabled the number of apprentices to increase in the years that followed (e.g. almost 450,000 apprentices in 2012), although they did not fully achieve the anticipated numbers. Over the years, the successive right-wing and left-wing governments have shown great continuity: they have all considered that a major solution for reducing youth unemployment was to strongly develop apprenticeships, hoping that most young people would choose them, as is the case in other neighbouring countries that are often cited as examples (Germany, Switzerland, Denmark, etc.).

The latest apprenticeship reform, carried out by the current government, was made in 2018. Its objective is once again to strongly develop apprenticeship through liberal-inspired measures, which are supposed to make it more attractive for both young people and employers and easier to implement administratively. According to the minister who led this reform (M. Pénicaud) the objective "... is to change the image of apprenticeship and to transform it in depth, to change its scale and to make

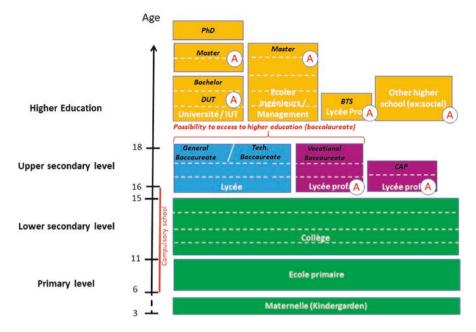


Fig. 7.1 organisation (simplified diagram) of the French educative system (including vocational higher education)

it a path of excellence and success for all young people". The latest figures show that the number of apprentices is on the rise again after a drop between 2013 and 2016, following the 2008 crisis. The number of apprentices should exceed 500,000 by 2020, despite the difficulties linked to the COVID-19 health crisis. It remains to be seen whether this is a sustainable trend or a one-off increase.

Apprenticeship: A Rather Unfavourable Effect on Vocational Education

A question that needs to be addressed is whether measures that were aimed at developing alternance training through the preferred route of apprenticeship helped to raise the prestige of secondary vocational training, as it was one of its goals.

To answer this question, it is interesting to look at the figures (Table 7.1).

Table 7.1 shows that the total number of apprentices (last line) has increased significantly: 303,648 in 1995, 478,803 in 2019. This is an increase of 57% in 24 years. Apprenticeship is therefore a more attractive training route than in the past. But behind this overall development, we can see that the share of secondary level apprentices (Voc. Bac. + CAP) has changed completely. It was 93,5% in 1995, with 79,9% of apprentices preparing a CAP training course. 24 years later (2019) secondary level apprentices only represent 57% (35% for CAP and 22,4% for

Table 7.1 evolution of the number and distribution (%) of apprentices by degree level^a

		1995		2000		2005		2010		2015		2019	
		qu	%	qu	%	qu	%	qu	%	qu	%	qu	%
Tertiary level	Master	1948	9,0	6185	1,6	11,431	2,9	30,142	7	46,041	11,2	68,480	14,3
	Bachelor, BTS, DUT 18,102		9	١.	12	59,296	15	81,263	18,7	97,972	23,9	135,366	28,3
Upper second. level	_		13,6	13,6 69,355	18,4	86,609	21,9	123,018	28,4	101,582	24,7	107,255	22,4
	CAP or similar		6,67	255,517 67,9 238,331	6,79	238,331	60,2	199,100	45,9	60,2 199,100 45,9 169,914 41,4 167,702 35	41,4	167,702	35
	Total	303,648	100	303,648 100 376,058 100 395,577 100	100	395,577	100	433,523	100	433,523 100 410,509 100	100	478,803 100	100
							1		,		,		(

^aFrom: Repères et références statistiques 2021, DEPP, Ministère de l'éducation nationale – https://www.education.gouv.fr/reperes-et-references-statistiques-2 021-308228

vocational baccalaureate), while the share of those in higher education has increased dramatically to reach 42,6% (14,3% for Master degree and 28,3% for Bachelor, BTS or DUT).

Indeed, today's apprentices have little to do with those of the mid-1990s and even less with those of the 1970s. They constitute a much less homogeneous population. Based on statistical work on the characteristics of apprentices (educational background, type of diploma prepared, parents'qualifications, etc.) Moreau (2013) distinguishes, for example, three very different groups of apprentices.

The first group brings together young people who have in common a difficult education pathway during primary school and lower secondary school (i.e. "college" in France). The choice of apprenticeship is in a way obvious for them because one of their parents was often also an apprentice and is a worker or craftsman. It allows them to leave a school environment that was not successful for them for another route that they see as very different, closer to the world of work. They build their identity by rejecting this school culture, in a strong affiliation to a working class or artisan culture, in a logic close to what Willis (1977) showed in England many years ago.

The apprentices belonging to the second group have a more positive relation to school. Their school career was less difficult, but their school grades did not allow them to go into the general or technological routes and to pursue long studies, despite a clear preference for these. They opted for a vocational baccalaureate through apprenticeship to become more professional and find a job more easily than in a school-based course.

The third group is composed of apprentices who opted for an apprenticeship at a later stage. They made this choice when they arrived in higher education, after obtaining a general or technological baccalaureate. They are generally unfamiliar with the world of work and have not yet developed any knowledge or skills that can be used in the labour market. Apprenticeship, which is praised by several academic institutions as an effective means of professionalisation, appears to them as an attractive and progressive way to integrate the labour market. It also provides a salary, which is often important for students whose families have low capacity to pay for long studies.

Table 7.1 shows that the third group benefited the most from the development of apprenticeship. It has become a relatively attractive training pathway in higher education for many young people and their families who perceive it as a more effective preparation for their integration into the labour market than classical academic education. On the other hand, the trend seems to be more unfavourable for secondary vocational training (particularly at CAP level), which is clearly suffering from this competition with higher education. It is not difficult to understand that employers, if they have the choice between an apprentice who is a minor, with a fairly low level of basic knowledge, and one who is an adult, with a higher level of general culture and a greater capacity for autonomy, will more often opt for the latter.

For some economists, this choice to develop apprenticeship at all education levels is not an effective solution to upgrade the standing of secondary vocational training, or to decrease youth unemployment (Arrighi, 2013; Cahuc & Hervelin,

2020). This results in directing a large part of the apprenticeship funding (in the range of several billion euros) towards populations that do not need this training modality as much for their professional training and integration into the labour market. Indeed, unemployment does not affect higher education graduates very much, even when they did not undertake an alternance training course. They generally find work quickly (in less than 6 months or 1 year). On the other hand, young people without a diploma or those with a CAP or vocational baccalaureate are much more affected by unemployment, which means giving higher education graduates an extra advantage over secondary school graduates who already have lower chances. According to these researchers, apprenticeship should therefore be reserved for these secondary courses.

However, most young people following a vocational training course at this level continue to do so through the school-based system. This shows the durability of a school-based system inherited from history, from which it is not so easy to make a break, despite the wishes of the public authorities. Thus, in 2019, there were just under 650,000 pupils following a school education in a vocational lycée (upper secondary school). Table 7.1 shows that there were about 275,000 in secondary apprenticeship training. Perhaps the recent reform of 2018 will change this situation in the coming years. But the long-term trend is not in favour of a strong development of apprenticeship at secondary level.

Conclusion

The choice to develop apprenticeship at all education levels in France and its consequences for secondary vocational training cannot be understood without considering several very strong concerns that have been running through French society and its elites for many years.

First, republican universalism, which is a strong common value in the French society, pushed for the development of a common general culture for all. Since the 1789 revolution, this cultural baseline has been considered as necessary for the exercise of citizens' rights and duties and to ensure that the people adhere to the political nation. Another legacy of the revolution and enlightenment is rationalism (Greinert, 2005). School meritocracy, mainly based on the capacity to learn academic knowledge, is the most legitimate way to select the elites of the country. Practical knowledge and vocational education are still considered of secondary importance in the French school system and in political debates (Troger et al., 2016). These concerns must be taken into account to understand: (1) the focus of school policies on general education and the lesser consideration given to secondary vocational education; (2) why, as mentioned above, there has always been a significant proportion of general education (including general knowledge not directly useful for the exercise of a trade) in all secondary vocational training courses (Pelpel & Troger, 2001); (3) the development of school policies aimed at extending the length of studies, with the goals of ensuring that all pupils acquire a

common core of knowledge and skills (collège for all) and improving access to higher education, including for young people who choose the vocational route (via a vocational baccalaureate).

But at the same time, economic arguments have always been important (and sometimes even more). Answering employers' labour needs and developing company competitivity remained a strong preoccupation for all governments. However, the central State has always been less attentive to the demands of small and medium-sized enterprises than to those of big (both public and private) companies. The school-based VET system was set up in accordance with the interests of large companies. The latter found an interest in this form of vocational education until the 1970s. At that time, their discourse changed and became increasingly critical towards this school-based system. Clearly influenced by the situation in Germany, the solution for them became the development of alternance training and more particularly apprenticeship. Successive governments since the 1980s have all been in favour of the development of alternance training. In line with big employers' position, they privileged apprenticeship to develop this pedagogical preference.

The difficulties in promoting secondary vocational education can be partly explained by the primacy given to general education in education policies. These policies had two effects: (1) making vocational education less attractive, as it does not provide access to the most socially valuable jobs; (2) blurring the identity of these types of course, in particular the vocational baccalaureate, which is caught between vocational (preparing for a job) and academic (going on with further studies at tertiary level) objectives. Developing apprenticeship at all education levels led to significant consequences for secondary vocational education, which is struggling to take advantage of this to attract more young people and improve its image. The 3-year vocational baccalaureate has certainly enhanced its prestige, but we have seen that it is increasingly used not to prepare for a trade, but to continue in higher education.

How will this situation develop in the coming years? Will general education for all be extended (including general education for all pupils at the upper secondary level), thus leading to the gradual disappearance of secondary vocational education and the start of vocational training only in higher education? Another hypothesis would be that secondary vocational training would regain interest among new generations of students who believe less and less in the promise of long studies for all. Many participants were disappointed about the fact that long studies are not rewarded with stimulating and well-paid jobs. Others question the meaning and/or social usefulness of some highly skilled jobs and seek to return to more practical occupations, especially crafts. This explains the success of some craft training courses (cooking, butchery, carpentry, arts and crafts). The phenomenon still seems to be in minority, but it could increase in the coming years. Thus, it is no longer unusual to see certain students choosing, after a general baccalaureate, to reorient

²Many senior civil servants and politicians were trained in the same high schools as the heads of large companies in France. This partly explains the proximity of views between these different actors.

themselves towards a CAP or a vocational baccalaureate. Some employees also leave their jobs and take this type of training to redirect their career.

It seems, therefore, that the upgrading of the standing of vocational training is intimately linked to the upgrading and social desirability of the trades prepared (Palheta, 2012). Without this, any other measure, including the development of apprenticeships, even if they are a particularly interesting form of training that combines theoretical and practical learning, will have only marginal effects in making these courses more attractive.

References

- Arrighi, J.-J. (2013). L'apprentissage et le chômage des jeunes: En finir avec les illusions. *Revue Française de Pédagogie*, 183, 49–58.
- Beaud, S., & Truong, F. (2015). Introduction: Tous dans le supérieur? Regards croisés sur l'économie, 16(1), 10–26.
- Bodé, G. (2017). Les ateliers d'école d'enseignement technique (années 1860-années 1950), un objet insaisissable? *Histoire de l'éducation*, 147, 37–65.
- Brucy, G. (2017). Histoire et enjeux de l'enseignement technique et professionnel. In I. G. Brucy, F. Dhume, P. Kergoat, N. Hirtt, N. Lamamra, F. Maillard, & G. Moreau (Eds.), *Valoriser l'enseignement professionnel: Une exigence sociale* (pp. 13–42). Editions Syllespse.
- Charlot, B., & Figeat, M. (1988). Histoire de la formation des ouvriers, 1789–1984. Minerve.
- De Montmollin, M. (1984). L'intelligence de la tâche. Peter Lang.
- De Munck, B., Kaplan, S. L., & Soly, H. (Eds.). (2007). Learning in the shop floor. Historical perspectives on apprenticeship. Berghahn books.
- Gonon, P. (2008). Apprenticeship, vocationalism and opposing VET-reform trends in Europe. In V. Aarkrog & C. H. Jorgensen (Eds.), *Divergence and convergence in education and work* (pp. 57–76). Peter Lang.
- Greinert, W.-D. (2004). European vocational training systems. Some thoughts on the theoretical context of their historical development. *European journal of vocational training*, 32, 18–31.
- Greinert, W.-D. (2005). Mass vocational education and training in Europe Classical models of the 19th century and training in England, France and Germany during the first half of the 20th. CEDEFOP, Office for Official Publications of the European Communities.
- Lebrun, F., Venard, M., & Quéniart, J. (1981). Histoire de l'enseignement et de l'éducation. Tome 2. 1480–1789. Perrin.
- Leplat, J., & Hoc, J.-M. (1983). Tâche et activité dans l'analyse psychologique des situations. In J. Leplat (Ed.), *L'analyse du travail en psychologie ergonomique* (Vol. 1). Octares.
- Lembré, S. (2016). Histoire de l'enseignement technique. La découverte.
- Maillard, F. (2012). Professionnaliser les diplômes et certifier tous les individus: Une stratégie française indiscutable? Carrefours de l'éducation, 34(2), 29–44. https://doi.org/10.3917/ cdle.034.0029
- Moreau, G. (2013). Apprentissage(s). Homogénéité et hétérogénéité d'un dispositif. Revue Française de Pédagogie, 183, 39–48.
- Palheta, U. (2012). La domination scolaire. Sociologie de l'enseignement professionnel et de son public. PUF.
- Pastré, P. (1994). Le rôle des schèmes et des concepts dans la formation des compétences. Performances humaines et techniques, 71, 21–28.
- Pelpel, P., & Troger, V. (2001). Histoire de l'enseignement technique. L'harmattan.
- Prost, A. (1992). Education, société et politiques. Une histoire de l'enseignement en France, de 1945 à nos jours. Le Seuil.

- Troger, V., & Brucy, G. (2000). Un siècle de formation professionnelle en France: La parenthèse scolaire ? *Revue Française de Pédagogie, 131*(1), 9–21.
- Troger, V., Bernard, P.-Y., & Masy, J. (2016). Le baccalauréat professionnel: Impasse ou nouvelle chance? PUF.
- Veillard, L. (2017). La formation professionnelle initiale. Presses Universitaires de Rennes. https:// halshs.archives-ouvertes.fr/halshs-01539790
- Willis, P. (1977). Learning to labor: How working class kids get working class jobs. Columbia University Press.
- Zarifian, P. (2001). Le modèle de la compétence. Trajectoire historique, enjeux actuels et propositions. Editions Liaisons.

Chapter 8 Promoting the Standing of VET in Finland: Balancing the Different Aims of VET



Heta Rintala and Petri Nokelainen

Abstract According to EU policy, two factors are considered critical for ensuring the attractiveness of vocational education and training (VET): high quality learning pathways that are flexible and permeable and links between education and the world of work. In Finland, multiple VET-related reforms have been enacted in recent years. The VET reform highlighted individual study paths and flexibility, the extension of compulsory education placed further emphasis on youth education and the reform of continuous learning emphasised upskilling and reskilling opportunities. In this chapter, the standing of VET is first discussed based on statistical data. A small-scale Delphi study with a panel of experts was conducted to examine the current standing of VET in more detail and to reveal developments and future directions that could facilitate the promotion of VET. The results indicate that instead of continuous reforms and development projects, long-term development focused on improving quality is required, which can only be achieved with the support of stable funding. Nevertheless, the findings imply that implementing measures to promote the standing of VET will require effort, as the task will involve finding a balance between the different target groups and varying aims of VET as a promoter of social inclusion and economic growth and between employment and further education pathways.

Keywords Vocational education and training · Finland · Standing · Status · Attractiveness · Policy · Reform · Parity of esteem · Permeability · Learning pathways · Lifelong learning · Flexibility · Quality · Funding

H. Rintala (⊠)

Häme University of Applied Sciences, Hämeenlinna, Finland e-mail: heta.rintala@hamk.fi

P. Nokelainen

Tampere University, Tampere, Finland

Policy Guidelines for Developing the Standing of VET

Vocational education and training (VET) systems are not static; rather, they are shaped by factors such as policy developments and domestic institutional changes (Trampusch, 2009). In an era defined by digitalisation, new business models, demographic changes, sustainability, and economic crises, there are high expectations for VET. At the European policy level, the New Skills Agenda for Europe (European Commission, 2016) has demonstrated its strong focus on 'making VET a first choice' in two ways: by increasing its attractiveness through the quality, flexibility, and permeability of learning pathways to higher education (HE) and by establishing closer links with the world of work. Furthermore, the European Council's (European Commission, 2020) recommendation on VET for sustainable competitiveness, social fairness and resilience emphasised that it must serve as a driver for innovation, growth, and sustainability; adapt to labour market changes; and become learner-centred, inclusive, and accessible. To complement and operationalise its vision and strategic objectives, the recent Osnabrück Declaration (EU Council, 2020) made by ministers in charge of VET in EU countries conceptualised new policy actions and also suggested that the attractiveness of VET could be enhanced through higher quality, adaptability, flexibility, inclusiveness, and permeability of learning pathways.

A recent education policy report by the Finnish Government (2021) outlined their targets for education and research towards 2040. The report stated that education and competence levels should improve and that equal opportunities for learning and education should be offered. Regarding VET, the report highlighted the importance of diminishing the boundaries between general education (GEN) and VET, setting the following three objectives and actions needed for the further development of upper secondary education:

- (i) *Promote equity and equality* by introducing new technologies, promoting individualisation of studies, securing student welfare services, lowering boundaries between GEN and VET and adding common units in qualifications.
- (ii) Strengthen responses to changes in the world of work by building partnerships between it and education, adding possibilities for workplace learning and mobilities, and crossing boundaries between different levels and fields of education.
- (iii) Enhance the impact of upper secondary education and promote accessibility by developing digital services, encouraging the sharing of resources (such as facilities, staff, and equipment) between different levels of education and reforming the structure of education providers (e.g., mergers between VET and general upper secondary providers).

In summation, it would appear that these developments highlight individual study paths and promote bringing VET closer to GEN (such as through common units in qualifications that promote generic skills). In addition, they highlight the need for closer connections to the world of work. In practice, upper secondary education is

expected to work collaboratively to ensure the accessibility of education. As the education policy report was drafted by the Finnish government, it is closely linked to current reforms, strategies, and developments adopted in VET, which are discussed in this chapter. Specifically, this discussion relates to the current position and aims of VET within the education system. By comparing the aims and developments, it is argued within the chapter that promoting the standing of VET requires finding the balance between different objectives. First, an overview of the standing of VET in Finland is presented, followed by a discussion of the reforms and strategies. Although the focus is on policy developments specifically related to VET, it should be noted that next to international and national policy initiatives, there are various levels of development that are inevitably related to the standing and status of VET, including curriculum initiatives and practices (see also Billett et al., 2022).

The Standing of VET in Finland

The standing of VET is usually combined with its position in the education system and the value of qualifications (Lasonen & Manning, 2001). Furthermore, the status and attractiveness of VET are widely related to opportunities provided by VET qualifications in the labour market or further education (FE), the status of occupations and the subjective standards of living (Lasonen & Gordon, 2008; Protsch & Solga, 2016; Russo et al., 2019). In practical terms, the attractiveness of VET is visible in educational preferences and enrolments (Busemeyer & Garritzmann, 2017; Russo et al., 2019).

In Finland, both the VET system and GEN are situated within the upper secondary level. When the standing of VET in the education system is studied from the perspective of enrolments (in 2019), 40% of compulsory school leavers continued in vocational education and 54% in GEN, while 2.4% did not continue their studies at the upper secondary level (Official Statistics of Finland, 2020a). Figure 8.1 presents an overview of the transitions of compulsory school leavers from 2000 to 2019. It can be observed that a larger share of compulsory school leavers continued in GEN than in VET. Moreover, within two decades, an average of 7545.6 students (SD = 2273.394) continued in GEN. The figure also indicates that the greatest gap between pathways was between 2000 and 2004 (M = 11070.0, SD = 654.123), although it eventually narrowed to an average level of 6371 students (ranging from 5179 to 8781, SD = 988.323). The number of students who did not continue their studies after compulsory education was naturally lower and has remained quite stable over the years (M = 4510.7, SD = 1557.940). In comparison, the average number of non-continuing students was clearly at a lower level (M = 1829.3, SD = 491.602) between 2014 and 2017.

Overall, the image of VET is quite positive in Finland. However, compared to GEN, recent image surveys suggest that VET is less respected (see Ministry of Education and Culture, 2021a). Moreover, GEN is considered to offer an excellent basis for higher education and strong general knowledge, whereas it is assumed that

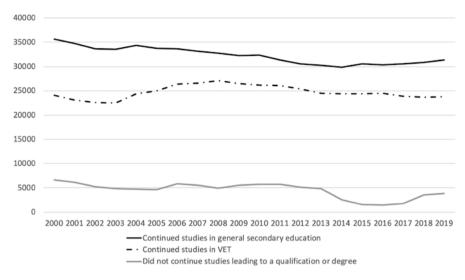


Fig. 8.1 Compulsory school leavers' direct transition to FE 2000–2019 (Official Statistics of Finland, 2020)

VET requires a clear vision of the field (or profession of interest) and provides concrete skills and abilities to gain employment. Overall, studying within the VET system is considered more flexible, relaxed, and less pressurised compared to GEN, and is perceived as a good option for practice-oriented students who learn by doing. Similarly, the Cedefop opinion survey administered through the ReferNet network (Finnish National Agency for Education, 2018) indicated that although VET has a positive image, the majority of respondents thought that GEN has a better image.

In the UK, the term 'parity of esteem' is used to emphasise the idea that vocational and academic education should be given equal weight (James Relly & Keep, 2020). Based on the law in Finland (Act on Vocational Education and Training 531/2017), the purposes of VET are to increase and maintain vocational competence, promote employment, develop working life and businesses, respond to skills needs, and support lifelong learning and professional growth. Another aim of VET is to support learners' development into 'decent, well-rounded and educated' human beings and members of society who possess the knowledge and skills needed to pursue further education and advance their professional development (Act on Vocational Education and Training 531/2017). While GEN also highlights social inclusion, it emphasises honing student competences, which are especially required in tertiary education (Act on General Upper Secondary Education 714/2018). Overall, the aims of VET emphasise its importance as a means of supporting economic growth and as a vehicle for social inclusion (Nilsson, 2010). Traditionally, Nordic countries have highlighted social inclusion, although it would seem that including all students while simultaneously maintaining the high esteem of VET remains a challenge (Larsen & Persson Thunqvist, 2018). Lappalainen et al. (2019) suggested that the Finnish VET system has increasingly focused on employability

and entrepreneurship in recent decades in addition to meeting the needs of the labour market.

In addition to enrolment, opportunities in the labour market (and FE) may be related to the overall attractiveness of VET. When examining the situation of VET graduates one year after graduation (in 2019), 70% of those with initial vocational qualifications were employed (Official Statistics of Finland, 2019). There were also field-related differences in employment. In particular, 86% of students with an initial vocational qualification in the field of health and welfare were employed, compared to only 43% in the Information and Communication Technology (ICT) field, which constituted the lowest rate of employment (Official Statistics of Finland, 2019). In addition, 14% of graduates were unemployed, and 16% continued studying one year after graduation (Official Statistics of Finland, 2019).

All vocational qualifications have provided general eligibility for further studies since 1998. To achieve general eligibility for higher education, VET was reformed during the 1990s and 2000s. More general orientation and subjects were added to curricula, all initial vocational education programs were extended to 3 years in all fields (previously 2-3 years), and compulsory and systematically organised on-thejob learning periods (minimum of 6 months during studies) were introduced in all study programs (Virolainen & Stenström, 2015; Virtanen & Tynjälä, 2008). Based on the OECD's PISA and PIAAC data, Green and Pensiero (2016) noted that curricula with core skills and standardisation (in terms of programme duration) could promote a relative parity of esteem amongst different educational tracks. Interestingly, a recent Finnish study (Ollikainen & Karhunen, 2021) found that general eligibility has had no long-term impact on enrolment in HE or labour market outcomes. Instead, it may have increased the probability of VET students dropping out. In the Swedish context, Hall (2016) similarly concluded that longer programmes and increased general content may actually lead to higher dropout rates, especially among male students.

The Finnish HE system includes academic research universities and universities of applied sciences (UAS, which were established in the 1990s) to create more practice-oriented options within HE (Haltia et al., 2021; Stenström & Virolainen, 2016). The Government Programme (Finnish Government, 2019) and visions set for education have emphasised that the share of higher education graduates should be increased by 2030 to ensure that 50% of the age cohort completes a higher education degree.

When examining the pathways from vocational education to HE in 2017, 30% of new students in UAS had only a vocational qualification, with no matriculation examination of general upper secondary education (Ministry of Education and Culture, 2019a). In comparison, the number of entrants to traditional universities with VET backgrounds and only possessing a vocational qualification was very limited; in 2017, 3% of new students in universities had only a vocational qualification (Ministry of Education and Culture, 2019a). The reasons for not continuing into HE (especially universities) may be related to various factors, such as the admission system favouring GEN, inadequate and biased guidance towards employment (or UAS), or simply a lack of awareness of the criteria for eligibility (Finnish national

union for students, 2018, p. 68). Moreover, it would appear that students without a matriculation examination from the upper secondary GEN take a longer study path to HE, with more vocationally oriented institutions (such as UAS) being the first step toward HE (Haltia et al., 2021). Regarding the permeability of learning pathways to HE, it has been suggested that the division between academic GEN and vocational education is a predominant feature of both upper secondary education (VET and GEN) and HE (UAS and universities) in Finland (Isopahkala-Bouret, 2015).

As a further comparison between VET and GEN pathways, Figure 8.2 shows that the number of older VET students (aged >19 years) has increased over the years, highlighting the importance of VET being a part of lifelong learning in Finland. In 2019, 60% of new students were aged over 25 years (Official Statistics of Finland, 2020). In particular, this figure provides an overview of the starting and overall rates of upper secondary-level education between 2004 and 2018, which emphasises the growing number of VET students compared to GEN students. Furthermore, two trends have emerged in the number of VET students registered over the last 15 years: there was a lower average number of VET students in the first time period (2004–2012, M = 231374.3, SD = 15786.021) compared to the second period (2013–2018, M = 290266.0, SD = 6218.355). This steep increment of approximately 40,000 VET students from 2012 to 2013 can be explained by changes in the compilation of statistics. Prior to 2013, data on the number of students in school-based VET were only collected on a specific day (20 September) instead of the entire calendar year (see Official Statistics of Finland, 2013).

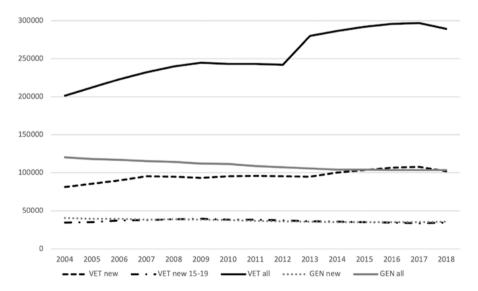


Fig. 8.2 Finnish secondary-level education: Starting and overall rates from 2004 to 2018. (Education Statistics Finland, 2021a, b).

Recent Reforms and Policy Directions Related to VET

In recent years, multiple reforms have been enacted in the Finnish education system. In this chapter, three reforms related to VET are briefly introduced and subsequently discussed in relation to the standing of VET in the country. Notably, the actual impacts of these reforms remain unknown.

The reform of vocational upper secondary education came into force in January 2018. This was implemented partly due to the depleted financial resources for education and highlighted the need to respond to changes occurring in working life and to meet future competence requirements more swiftly (Ministry of Education and Culture, 2021b). The reform emphasised competence-based, customer-oriented, and demand-driven approaches. In practice, the reform promoted flexibility and individual study paths with the help of personal competence development plans (PCDPs), whereby study time (and pace) can be flexible and vocational education can be completed in school- or work-based modes of learning. Work-based modes of learning include apprenticeship training (i.e., on an employment contract and including a wage in compliance with the applicable collective agreement for the student) and training based on an agreement (i.e., no wage or other compensation for the student). The flexibility of the VET system includes that no minimum or maximum amount is set for work-based learning. Furthermore, these modes of work-based learning can be flexibly combined during studies, such as in different qualification units.

From the perspective of VET providers (private providers, municipalities, and joint municipal authorities), the reform removed any boundaries between education for youth and adults by combining previous laws under one legislation. Simultaneously, the provision of education, funding, and steering systems emerged. Owing to the reform, VET providers had more local autonomy in directing their educational offerings. From the perspective of funding, prior to the reform, the amount of funding was related to the number of student years annually, which promoted longer study durations. In the newly reformed funding system (see Ministry of Education and Culture, 2019b), the focus shifted toward performance-based funding (completed qualifications and competence points of qualification units) and effectiveness-based funding (related to access to employment and further studies).

To support access to employment and further studies and to ensure that every young person completed upper secondary education, the extension of compulsory education (which came into force in August 2021) raised the minimum school leaving age to 18 years (see Ministry of Education and Culture, 2021c). Thus, compulsory school leavers are now obliged to apply for further studies, and compulsory education is extended until a student either obtains an upper secondary level qualification or turns 18 years old. Apart from the previously mandated free education and daily meals, students are now provided with computers, textbooks, and other learning materials, in addition to equipment and outfits required in instruction.

The ongoing parliamentary reform of continuous learning (to be completed by March 2023) focuses on skills development for the working-age population (see

Ministry of Education and Culture, 2021d). The measures included in the reform are related to increasing opportunities for retraining, providing flexible opportunities to study in HE, and developing study leave and financial aid for adult students. Simultaneously, new ways of recognising informal and nonformal learning are also being identified. In the VET system, the focus of the reform is mainly on underrepresented groups (such as immigrants and adults with weak basic skills) and on lowering their threshold for participation in VET. Here, emphasis is placed on smaller units of qualifications (instead of whole qualifications) and on vocational studies that are offered in conjunction with training that promotes generic and language skills (Ministry of Education and Culture, 2021e).

Expert Views on the Standing of VET in Finland

To enrich current perspectives on the standing of VET and to determine directions for its development, expert views were collected during spring 2021 using a Delphi study (e.g., Brady, 2015). Invitations to participate in the survey were sent to 20 individuals who were considered experts in the field of VET. The aims of the purposive sampling were to reach stakeholders who could provide various perspectives on VET and to ensure that the voices of students, teachers and education experts, education providers, and employee/employer organisations and business life were heard. In total, 13 experts representing the various stakeholder groups volunteered to participate in the study.

In the first round of the questionnaire, the experts were asked to confirm their consent to participate anonymously in the study and provide some background information. They were then asked to answer the following open-ended questions: (1) How do you see the standing and status of VET at the moment? (2) How would you evaluate the recent reforms in relation to the standing and status of VET, and (3) according to your opinion, what types of action can promote the standing and status of VET now and in the future? In these questions, 'standing' referred to the position of VET in the education system, while 'status' referred to the esteem and value of VET.

A total of 10 experts (7 female and 3 male) who had years of experience in VET $(M=10,\,SD=7.2)$ answered the first-round questionnaire. The received answers related to the standing of VET and the actions needed to promote VET were summarised via thematic analysis (e.g., Terry et al., 2017). To build consensus on the standing of VET, a summary of these first-round results was sent to experts to allow them to comment on their views and add insights regarding the summary.

In addition to the summary, statements relating to the standing and status of VET were added to the second round of the questionnaire, which was partly based on the answers received during the first round of the survey. The experts were asked to rate each statement according to its probability (from 1 = 'very improbable' to 5 = 'very probable') and desirability (from 1 = 'very undesirable' to 5 = 'very desirable'). In addition, they were provided with an opportunity to comment on their views. Only

six experts answered the second round of the questionnaire, which should be noted when interpreting the findings.

Perspectives on the Standing and Status of VET

In this section, the standing of VET in Finland is further described based on the experts' views. The themes presented below highlight how the position of VET was experienced internationally, within the education system, in relation to its purposes, and amongst the key stakeholders.

Finnish VET Has a Good International Status Two of the experts noted that Finnish VET has relatively good status and specific strengths (compared to its international counterparts). These strengths included flexibility, cooperation with the labour market, and an inclusive and integrated approach in relation to skills development for the whole working age population. The experts noted that these strengths were highlighted during the current pandemic, where VET was able to remain relatively responsive and functional owing to its flexible organisation in different learning environments.

General and Higher Education Have a Higher Standing Within the Education System The experts noted that VET has a solid and established standing in the education system. In particular, two of the experts underlined that the standing of VET has improved. Nevertheless, the experts also recognised that undermining and even negative attitudes toward VET remain, with six experts referring to the media and public discussion as sources of the negative image. The experts thought that VET was not depicted in a balanced way by the media or in public discussions. Instead, it is often viewed from a negative perspective that highlights the challenges. Such negative framing was considered to impact the image of VET, as individual accounts from students, parents, or teachers are generalised to represent the entire field of VET. Concerning compulsory school leavers, the experts noted that young people may have a more positive attitude toward VET compared to their parents or career counsellors. In fact, half of the experts cited problems related to general attitudes, levels of parental education, or biased career guidance. As one expert stated, '[I]t is highly questioned why a young person who could cope in general education would like to choose VET'. Others mentioned that this challenge may be more visible in urban areas and may have been worsened by a 'youth guarantee' scheme to tackle youth unemployment.

Five of the experts discussed the standing of VET in relation to working life and employment, emphasising that skilled and qualified workers provided by VET are needed by the labour market. However, they also remarked that there were field-related differences. For example, some vocational fields are not attractive for highly motivated students, and choosing the VET pathway may imply lower wage premiums and weaker career prospects compared to choosing GEN.

The standing of VET in relation to raising the level of education and competences was discussed by five experts, who acknowledged the expectation that an increasing number of VET graduates should obtain HE qualifications. Nevertheless, they also mentioned that the VET pathway towards HE is weakly supported, with more resources being allocated directly to HE. Their opinions further highlighted the presence of unnecessary boundaries between upper secondary VET and HE. This manifests in the rigid separation of upper secondary level specialist vocational qualifications (EQF Level 5, ISCED 4) from HE qualifications instead of considering them from the perspective of the competence levels achieved. In the HE system, the important role of UAS in promoting vocational and professional skills was emphasised. However, further pathways from UAS qualifications to master's degrees and doctoral studies in research universities were considered inflexible.

The VET System Places a Greater Focus on Youth Education Although the recently enacted law on VET abolished the boundaries between youth and adult education, four experts noted that the separation between them remains visible when discussing the standing and status of VET. One expert described how 'the standing and status of VET is largely based on how it manages in educating compulsory school leavers. Although the volume of adult education is higher, it is not similarly highlighted as youth education'. This was also considered to manifest in public discussions on youth education and related challenges. The experts described how VET is most often perceived as a direct continuation of compulsory education. They also expressed that competence development within the VET system (in the form of qualification units or as further and specialist vocational qualifications) is not as visible as it should be compared to initial vocational qualifications. Nevertheless, the contextualised nature of VET was also noted, as some specialist vocational qualifications were considered highly popular. On the whole, it was expected that due to changes in skills needs, there would be an increased requirement for further training and the reskilling and upskilling of adults, although youth education is also highlighted.

VET Has a Good Standing Amongst VET Stakeholders When considering the perspectives of the education system, the world of work, and students choosing VET, it was highlighted that young people who had chosen VET were satisfied with their choices. When considering VET providers and their cooperation with working life, the need to respond to changes was considered both essential and difficult. Although an important aim was to build partnerships, it was noted that the flexible opportunities provided by the reform were not recognised in workplaces. In addition, negative publicity and public discussion focused on problems and budget cuts, which were considered detrimental to the standing of VET in the world of work.

In the second-round questionnaire, statements related to VET in the Finnish education system were used to collect further information related to the standing of VET ('In 2031, VET in Finland...'). The experts were asked to rate the probability and desirability of the statement from their perspectives. They were unanimous and rated the desire that VET '...is publicly valued (media, papers)', '...is, in

comparison to general education, an equal pathway also for high-achieving students', and '...is as valued as general education' the highest. However, the experts did not fully agree on the probability of these future projections, as they were considered both probable and quite neutral. In the additional comments, the experts suggested that the status of VET would continue to improve as the number of parents with UAS degrees increased. Moreover, the experts commented that comparisons with GEN were not meaningful, as this did not sufficiently acknowledge the role of VET and adult students.

Perspectives on Current Reforms and Developments

In this section, expert views on the current reforms are briefly summarised. According to the experts, the reform of vocational upper secondary education both improved and worsened the image of VET. They described the 'forward-looking' reform as much needed and having the potential to promote the standing of VET in the country. However, based on their views, negative public discussions tend to hamper the achievement of this goal. One expert further noted that the reform and its highlighting of work-based learning may have increased the gap between VET and GEN. Nevertheless, the experts believed that the reform enhanced the system's flexibility and individuality, which could also serve the needs of those already in the labour market more effectively.

The experts also noted that because the implementation of the reform is still in progress, VET providers may be at different stages in the implementation process. Furthermore, it was suggested that full implementation of the reform would require changes in the culture and pedagogical practices. Many of the experts emphasised that implementation of the reform suffered from simultaneous budget cuts in VET. As a result, many problems related to depleted resources have been falsely perceived as an impact of the reform.

Meanwhile, the extension of compulsory education was experienced as emphasising the role of VET in social inclusion instead of increasing and maintaining vocational competence and lifelong learning. Moreover, the reform was considered to possibly have negative and positive impacts on the standing of VET. On the one hand, if the reform forces young people to study in VET without any basic skills or real interest, it may have negative impacts. On the other hand, the reform may promote the accessibility of education and encourage young people to choose their field of vocation more freely, especially since the education (and resources such as tools) are provided free.

In terms of reforming continuous learning, the experts suggested that the role of VET in lifelong learning systems is neither recognised nor widely discussed. They even thought that this could diminish the standing of VET, as this role is not often acknowledged in its development. One expert noted that improvements in continuous learning could support further implementation of the VET reform by encouraging the use of qualification units and smaller parts of the qualification.

In the second-round questionnaire, the experts unanimously rated the future projection '[I]n 2031, VET implements individual study paths with high quality and success' as both very probable and very desirable. With respect to the recent reform of compulsory education, the state '...the extension of compulsory education has weakened the status of VET, as it is considered more strongly as a responsibility than choice' was considered undesirable. However, this garnered the most varying views on probability, as the experts considered it both improbable and probable. When considering VET from the perspective of lifelong learning, the experts unanimously expressed the opinion that it is probable (or very probable) and desirable (or very desirable) that VET '...breaks the boundaries between upper secondary education and HE with flexible study modules' and '...is a valued part of the lifelong learning system'. Furthermore, a few experts mentioned in their additional comments that the role of lifelong learning is expected to stand out in the future as the world, professions, and careers undergo changes.

Further Perspectives on Future Directions

As part of the first and second rounds of the questionnaire, experts could suggest actions and measures to promote the standing of VET. The experts especially highlighted two wider directions: a focus on the quality of VET and the need for stable funding.

Promoting Long-Term Development and Focusing on Quality The experts thought that the continuous changes were burdensome, and there was a need to focus on implementing the changes introduced. The experts viewed education politics as short-term; currently, from their experiences, support for the implementation of the VET reform had diminished due to the change of government. As one expert mentioned, 'long-term development actions aiming at developing the quality of VET are in the key position', while according to another expert, 'it all starts with the high-quality VET—it is the best way to make VET attractive'.

Nevertheless, it would appear that what constitutes high-quality VET varies depending on the considered aim. The experts mentioned the following directions for further development:

- Focus more on generic skills and general content in youth education to support pathways to HE.
- Place greater emphasis on adult education and showcasing its role as part of VET.
- Enhance the implementation of individual study paths and flexibility (especially in adult education).
- Foster work-based learning and collaboration between education and the world
 of work to ensure that VET responds to the needs of employers and that teaching
 and guidance are up-to-date and of high quality.

The Need for Stable VET Funding Instead of carrying out development activities as projects, the experts highlighted the role of stable funding given that current funding was considered fragmentary. Six experts mentioned the need to develop a funding system that provides sufficient resources and is more foreseeable for VET providers. One expert described how VET stakeholders can develop high-quality VET, although policymakers should ensure sufficient economic operating conditions. They also mentioned that more resources should be directed toward teaching, student welfare services, and youth work. Unfortunately, the experts thought it unlikely that the Finnish government would add more resources into VET, as the youth population is in decline. In the future, this is expected to further influence the structure of VET providers.

In the second-round questionnaire, there were variations in expert views when assessing the future projections '[I]n 2031...emphasis on work-based learning has distanced VET from general education and improved the attractiveness of VET' and '...adding general content and common units promoting generic skills has improved the attractiveness of VET'. The probability and desirability of these futures varied from neutral to very probable and desirable. In the additional comments, the experts further emphasised that VET has its own role and aims in the education system; hence, it should be developed from this perspective instead of rendering it more like general education. In addition, it was unanimously considered very desirable that '...VET is sufficiently and steadily financed', although this was not considered very probable.

Finding a Balance Among the Different Aims

The aims of this chapter were to determine the standing of VET in Finland and to identify recent and future directions that could improve its standing and status in both the education system and (more widely) within society. Based on statistical data and enrolments, VET has found its foothold next to GEN. However, the experts emphasised that comparisons between VET and GEN may not be meaningful, as VET has its own purpose and aims within the education system. Moreover, as VET in Finland is largely centred on adult education, considering VET as youth education next to GEN does not provide a full picture of its standing. This finding supports the view that 'parity of esteem' in Finland may not be suitable for describing VET in comparison to other education options or even sought after (cf. James Relly & Keep, 2020).

Diminishing the boundaries between GEN and VET is highlighted as an important policy goal in Finland (see Finnish Government, 2021). In this study, the experts expressed a need for the long-term development of high-quality VET, with a focus on generic skills and general content in youth education, which would support further learning pathways more effectively. However, they also expressed the need to enhance work-based learning and foster collaboration between education and the

world of work. These directions may divide opinions and may be difficult to combine. However, at the EU policy level, VET is also expected to promote the permeability of learning pathways to higher education and to establish closer links with the world of work (European Commission, 2016). As a solution to this dilemma, education policy in Finland has highlighted the need for individual and flexible study paths.

Responding to the various individual, social, and economic aims is not without challenges. In addition, within the publicly funded education system, directing funding may be linked to prioritising aims and target groups. In addition to the current focus on youth education and fostering social aims, the experts suggested that more emphasis is needed on adult education and further vocational education, also from the perspective of funding. This finding suggests that highlighting social inclusion may be negatively linked to the status of VET, which was also revealed in a previous Nordic study (Larsen & Persson Thunqvist, 2018). Therefore, in this chapter, it is suggested that more discussion is required on the purposes of VET and the measures to support those purposes.

This work may support development activities by making the different target groups, aims, and stakeholder views more visible. However, this study has several limitations that should be noted when interpreting the findings. The Delphi study with experts was small-scale, based on purposive sampling, and was conducted anonymously. This anonymous implementation meant that the positions and perspectives of the eventual participants were not revealed, which undoubtedly limits interpretations of the findings. Although implementing the Delphi study did not provide a comprehensive account of the standing of VET from various stakeholder perspectives, the aims were to complement the statistics and introduce more current views related to the standing of VET. It should be acknowledged that education and policy preferences are often related to individuals' own experiences, priorities, and positions (Busemeyer & Garritzmann, 2017; Russo et al., 2019). The analysis of the expert views was supported by returning the summary of the standing of VET to the experts to check for accuracy and resonance with their views. Finally, as noted by the experts, the reforms have only recently been implemented, meaning their impact on VET (or its standing) remains to be seen.

References

Act on General Upper Secondary Education. (714/2018). Translation 20 August 2020. https://www.finlex.fi/en/laki/kaannokset/2018/en20180714.pdf

Act on Vocational Education and Training. (531/2017). Translation 9 April 2021. https://www.finlex.fi/en/laki/kaannokset/2017/en20170531

Billett, S., Dymock, D., Hodge, S., Choy, S., & Le, A. H. (2022). Chapter 6: Shaping young people's decision-making about post-school pathways: Institutional and personal factors. In S. Billett, B. E. Stalder, A. Vibe, S. Choy, S. Hodge, & A. H. Le (Eds.), The standing of vocational education and the occupations it serves: Current concerns and strategies for enhancing that standing. Springer.

- Brady, S. R. (2015). Utilizing and adapting the Delphi method for use in qualitative research. *International Journal of Qualitative Methods*, 14(5), 1–6.
- Busemeyer, M. R., & Garritzmann, J. L. (2017). Academic, vocational or general? An analysis of public opinion towards education policies with evidence from a new comparative survey. *Journal of European Social Policy*, 27(4), 373–386.
- Education Statistics Finland. (2021a). New students, students and qualifications. Vocational education and training. Accessed 4 Aug 2021. https://vipunen.fi/en-gb/vocational-education-and-training
- Education Statistics Finland. (2021b). Students and Matriculation Examination Graduates. General upper secondary. Accessed 4 Aug 2021. https://vipunen.fi/en-gb/general/Pages/Opiskelijat-ja-ylioppilastutkinnon-suorittaneet.aspx
- Council of the European Union. (2020). Osnabrück Declaration on vocational education and training as an enabler of recovery and just transitions to digital and green economies. https://www.cedefop.europa.eu/files/osnabrueck_declaration_eu2020.pdf
- European Commission. (2016). A new skills agenda for Europe. Working together to strengthen human capital, employability and competitiveness. https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:52016DC0381
- European Commission. (2020). Council Recommendation on VET for sustainable competitiveness, social fairness and resilience. https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CE LEX%3A32020H1202%2801%29
- Finnish Government. (2019). Programme of Prime Minister Antti Rinne's Government 6 June 2019. Inclusive and competent Finland A socially, economically and ecologically sustainable society. http://urn.fi/URN:ISBN:978-952-287-760-4
- Finnish Government. (2021). Education policy report of the Finnish government. *Publications of the Finnish Government*, 2021, 64. http://urn.fi/URN:ISBN:978-952-383-927-4
- Finnish National Agency for Education. (2018). *Cedefop opinion survey on vocational education and training in Europe: Finland*. Cedefop ReferNet Thematic Perspectives Series. https://cumulus.cedefop.europa.eu/files/vetelib/2018/opinion_survey_VET_Finland_Cedefop_ReferNet.pdf
- Finnish national union for students. (2018). AMIS 2018. Mitä kuuluu, ammattiin opiskeleva? [AMIS 2018 research, How are you doing, VET students?] https://www.amistutkimus.fi/wp-content/uploads/amis-2018-sisasivut-aukeamittain-painoon korjattu.pdf
- Keep, E., & James Relly, S. (2020). Development and challenges between supranational strategies and national traditions – The view from the UK. Beruf- und Wirtschaftspädagogik – online, 39.
- Green, A., & Pensiero, N. (2016). The effects of upper-secondary education and training systems on skills inequality. A quasi-cohort analysis using PISA 2000 and the OECD Survey of Adult Skills. *British Educational Research Journal*, 42(5), 756–779.
- Hall, C. (2016). Does more general education reduce the risk of future employment? Evidence from an expansion of vocational upper secondary education. *Economics of Education Review*, 52, 251–271.
- Haltia, N., Isopahkala-Bouret, U., & Jauhiainen, A. (2021). The vocational route to higher education in Finland: Students' backgrounds, choices and study experiences. *European Educational Research Journal*, 1–18.
- Isopahkala-Bouret, U. (2015). 'It's considered a second class thing': The differences in status between traditional and newly established higher education credentials. Studies in Higher Education, 40(7), 1291–1306.
- Isopahkala-Bouret, U. (2018). Stratification through a binary degree structure in Finnish higher education. In B. Roland, A. Mitterle, C. Paradeise, & T. Peter (Eds.), *The production of elites and the making of Elite Universities* (pp. 83–101). Palgrave Macmillan.
- Lappalainen, S., Nylund, M., & Rosvall, P.-Å. (2019). Imagining societies through discourses on educational equality: A cross-cultural analysis of Finnish and Swedish upper secondary curricula from 1970 to the 2010s. European Educational Research Journal, 18(3), 335–354.

- Larsen, L., & Persson Thunqvist, D. (2018). Balancing the esteem of vocational education and social inclusion in four Nordic countries. In C. Helms Jørgensen, O. J. Olsen, & D. Persson Thunqvist (Eds.), Vocational education in the Nordic countries: Learning from diversity (pp. 74–95). Routledge.
- Lasonen, J., & Manning, S. (2001). How to improve the standing of vocational compared to general education: A collaborative investigation of strategies and qualifications across Europe. In Cedefop (Ed.), *Training in Europe: Second report on vocational training research in Europe* 2000 (pp. 115–168). Publications Office.
- Lasonen, J., & Gordon, J. (2008). Improving the attractiveness and image of VET. In Cedefop (Ed.), Modernising vocational education and training. Fourth report on vocational education and training research in Europe: Background report. Office for Official Publications of the European Communities.
- Ministry of Education and Culture. (2019a). *Katse korkealle ja horisontti laajaksi. Näkökulmia ammatillisen koulutuksen järjestäjien ja korkeakoulujen yhteistyöhön* [An upward direction and broadening horizons. Perspectives on cooperation between vocational education and training providers and higher education institutions]. Publications of the Ministry of Education and Culture, 26. http://urn.fi/URN:ISBN:978-952-263-652-2
- Ministry of Education and Culture. (2019b). Financing of vocational education and training System that rewards outcomes and efficiency. https://minedu.fi/documents/1410845/4150027/Financing+of+vocational+education+and+training/cf88b996-d53a-1ac1-8d11-570b4ce12f50/Financing+of+vocational+education+and+training.pdf
- Ministry of Education and Culture. (2021a). Survey on the image of vocational education and training 2020. Key results. https://www.skillsfinland.fi/application/files/2316/2824/9746/Survey_Image_of_VET_2020.pdf
- Ministry of Education and Culture. (2021b). *Reform of vocational upper secondary education*. https://minedu.fi/en/reform-of-vocational-upper-secondary-education
- Ministry of Education and Culture. (2021c). Extension of compulsory education. https://minedu.fi/en/extension-of-compulsory-education
- Ministry of Education and Culture. (2021d). *Continuous learning reform*. https://minedu.fi/en/continuous-learning-reform
- Ministry of Education and Culture. (2021e). *Keskustelumuistio: Jatkuvan oppimisen mahdollisuuksien kehittäminen koulutusjärjestelmässä* [Discussion memo: Developing opportunities for continuous learning in the education system]. https://api.hankeikkuna.fi/asiakirjat/83d58d9a-95e5-425b-9b21-8328982e883b/60f58f0e-eeec-4617-9b55-493a38fad54e/MUISTIO_20211004104121.pdf
- Nilsson, A. (2010). Vocational education and training: An engine for economic growth and a vehicle for social inclusion? *International Journal of Training and Development*, 14(4), 251–272.
- Official Statistics of Finland. (2013). *Vocational Education*. http://www.stat.fi/til/aop/2013/aop_2013_2014-09-23_tie_001_en.html
- Official Statistics of Finland. (2019). Transition from school to further education and work. http://www.stat.fi/til/sijk/2019/sijk_2019_2021-01-21_tie_001_en.html
- Official Statistics of Finland. (2020). Students and Qualifications. http://www.stat.fi/til/opiskt/2020/opiskt_2020_2021-06-10_tie_001_fi.html
- Official Statistics of Finland (OSF). (2020). Entrance to education. Direct transition to further studies of completers of the 9th grade of comprehensive school 2000–2019. Statistics Finland. http://www.stat.fi/til/khak/2019/khak_2019_2020-12-10_tau_001_en.html
- Ollikainen, J.-P., & Karhunen, H. (2021). A tale of two trade-offs: Effects of opening pathways from vocational to higher education. *Economics Letters*, 205, 109945.
- Protsch, P., & Solga, H. (2016). The social stratification of the German VET system. *Journal of Education and Work*, 29(6), 637–661.
- Russo, G., Serafini, M., & Ranieri, A. (2019). Attractiveness is in the eye of the beholder. *Empirical Research in Vocational Education and Training*, 11(1), 1–22.

- Stenström, M.-L., & Virolainen, M. (2016). *The current state and challenges of vocational education and training in Finland*. Nord-VET. http://nord-vet.dk/indhold/uploads/Finnish-country-report-1B_0912_2014.pdf
- Terry, G., Hayfield, N., Clarke, V., & Braun, V. (2017). Thematic analysis. In C. Willig & W. S. Rogers (Eds.), The Sage handbook of qualitative research in psychology (2nd ed., pp. 17–37). Sage.
- Trampusch, C. (2009). Europeanization and institutional change in vocational education in training in Austria and Germany. *Governance*, 22(3), 369–395.
- Virolainen, M., & Stenström, M.-L. (2015). Recent Finnish VET reforms and innovations: Tackling the current challenges. Nord-VET The future of VET in the Nordic Countries. http://nord-vet.dk/indhold/uploads/Innovations-in-VET-in-Finland-2015.pdf
- Virtanen, A., & Tynjälä, P. (2008). Students' experiences of workplace learning in Finnish VET. *European Journal of Vocational Training*, 44(2), 199–213.

Chapter 9 Attractiveness of Vocational Education and Training in India: Perspectives of Different Actors with a Special Focus on Employers



Matthias Pilz and Muthuveeran Ramasamy

Abstract India is a country with a growing population and significant economic expansion. Therefore, skilling young people so they can contribute to this economic expansion is now a crucial goal for educational policy levels and the actions of educational institutions. Yet, apart from general statements concerning the 'lack of attractiveness of vocational education', little research-informed policies and practices exist about this important topic in India. In addressing this gap, this chapter draws upon studies undertaken so far on the issue of the attractiveness of VET in India. Its analysis focused mainly on the perspective of employers, but also on those of students and their parents and vocational teachers. The focus is on the Industrial Training Institutes (ITIs), which are important vocational education institutions in India. These institutes account for the largest share of formal VET provisions in India and are administered by either the state or private sector. Interviews in South India with employers of ITI graduates are described and discussed. The comparison with findings focused on the other stakeholders indicates that even when the motives are different; the attractiveness of VET in India is very low. The study explores three major influencing factors: The quality of VET programs including employability, payment and productivity and career perspectives in combination with further training. Then some means are advanced by which it might be possible to elevate the standing of vocational education through changes to the current situation on the policy level and the individual ITI and employer.

Keywords Vocational education and training \cdot Attractiveness \cdot India \cdot Industrial Training Institutes \cdot Employers \cdot Labour market \cdot Employability \cdot Quality of training \cdot Standing \cdot Productivity \cdot Investment in training

M. Pilz (⊠) · M. Ramasamy

University of Cologne, Cologne, Germany

e-mail: matthias.pilz@uni-koeln.de

Introduction

For more than a decade, vocational education and training (VET) in India has been of particular interest for different protagonists. Countries and international organisations engaging in foreign aid and economic development have been active in the field, trying to push skill development by different means and initiatives (see e.g., Dar, 2008; World Bank, 2017). Simultaneously, the Indian government has shown a major interest in skill development through formal VET (Agrawal, 2014) to engage and utilise the potential of a young and ever-growing population. This young and expanding population offers a large potential for growth and prosperity, on the one hand, but could indeed turn into a threat to economic and societal cohesion if India fails to develop the skills of its young labour force and provide opportunities for decent work (Mehrotra, 2014). Every year, approximately 12–13 million young people leave school in search of some vocational education, training or work (British Council, 2016). But even though 59% of the population is in the working- age group of 15–54 years (UNDP [United Nations Development Program], 2019), a shortage of skilled workers is evident (Agrawal, 2014).

This mismatch between supply and demand particularly affects the intermediate skill sector of skilled workers below the academic level (see Marsden & Ryan, 1995) which is also growing in India. One reason why the demand for skilled workers cannot be met, despite the large number of young people looking for good employment, is the alleged poor quality of formal VET (Tara et al., 2016) and the lack of willingness of companies to invest in training (Pilz, 2016a). However, how attractiveness is related to quality and company participation, among other things, is largely unexplored for India.

In this chapter, therefore, the attractiveness of VET in India will be presented and discussed on the basis of empirical findings. The focus is on the employers' perspective, but is framed by the interaction with other stakeholders, especially the students' perspective. The focus is on the Industrial Training Institutes (ITIs), which are important VET institutions in India. First, the Indian vocational training system with a special focus on ITIs will be outlined very briefly and then a theoretical concept for the study of attractiveness will be introduced, followed by the presentation and discussion of our own empirical findings.

Brief Overview of Formal Vocational Training in ITIs

Vocational training in India may start from grade nine onward and goes on into postsecondary education, depending on the type and level of course offered (UNEVOC [International Centre for Technical and Vocational Education and Training], 2018). It is not associated with higher education but refers to certificate-level training in a variety of craft skills. Entry requirements differ from course to course, however, a successful completion of grade eight is a minimum requirement for all courses except for some schemes targeting the informal sector (MSDE, 2018). In the main, VET is provided under two schemes: the Craftsman Training Scheme (CTS) and apprenticeship training under the Apprentices Act (Wessels & Pilz, 2018).

The most significant scheme in terms of the number of students for industrial trade training is the CTS, which was introduced in 1950 by the Indian government (MSDE, 2018). Courses are offered at governmental or private Industrial Training Institutes (ITI) that provide training programs of 6–24 months duration, depending on the occupation and course. Presently, there exist about 14 thousand ITIs with a capacity of around three million state-sponsored positions (MSDE, 2018). Privately financed and managed ITIs number about 12 thousand (MSDE, 2018), a major part of them accredited by the National Council for Vocational Training (NCVT) (Rao et al., 2014). Courses address 126 occupations, of which 73 are classified as technical and 48 as non-technical. The CTS scheme has a focus on practical instruction that constitutes 70% of the duration of the training program. Entrance requirements vary from successful completion of grade 8–12, according to the respective occupation (Wessels & Pilz, 2018). After completion of the course, students may receive a National Trade Certificate by the NCVT if they successfully complete the exam (MSDE, 2018). Teachers at ITIs are trained for 1 year under the Crafts Instructor Training Scheme (CITS) in 12 ATIs and other ITIs and training centers that are affiliated with the NCVT (MSDE, 2018).

While the number of ITIs has increased over the past years (see Rao et al., 2014; Wessels & Pilz, 2018), there are still not enough positions to meet the demand for skill training. Both governmental and private ITIs face serious challenges in areas such as teacher qualification and provision, equipment, learning content and curricula design (Dar, 2008). These factors result in overall poor training quality and a lack of employability of students who graduate (Dar, 2008; Tara et al., 2016; Jambo & Pilz, 2018).

Apprenticeship training is offered in a range of schemes under the Apprentices Act. It combines training in institutions and at the workplace, following a dual training approach adopted in many countries that combine educational experiences in workplaces and the training institutes. The Apprenticeship Training Scheme (ATS) offers a range of training options in trades and enterprises, addressing occupations designated by the government or 'optional trades' suggested by employers under specific requirements (MSDE, 2018). The scheme was initiated in 1961 under the Apprentices Act and was fashioned to meet the needs of industry and structure informal training according to specified standards. The main goal of this scheme was and remains to involve employers in VET and utilize industrial workplace settings for practical training, as institutional training was considered insufficient to generate the full set of practical skills needed for employment in those occupations (MSDE, 2018). The legal regulations governing apprenticeship training have been modernized iteratively to adapt the program to meet stakeholder requirements (Saxena & Gandhi, 2014), the last revision being in 2014 (MSDE, 2018). The scheme targets two groups of apprentices: (i) those who enter the program at a minimum age of 14 and (ii) after successful completion of grades 8-12, depending on the kind of training offered (Wessels & Pilz, 2018). There is a wide spectrum of 259 occupations in 39 areas (Saxena & Gandhi, 2014). Under the Trade Apprenticeship scheme, 360,000 positions are available per year (Wessels & Pilz, 2018). Trade apprenticeships fall under the responsibility of the MSDE as they form part of VET.

However, the significance of the program is questionable. Judging by the numbers and its acceptance by young people in search of training, it has proven rather unsuccessful. The number of positions offered is insufficient compared to the annual demand from young people in need of VET provision, as well as compared to the size of the economy itself (MSDE, 2018). Also, the apprenticeship schemes are not even utilized fully, as each year a large portion of the available positions and remain unoccupied. In terms of acceptance, the scheme's targeting of graduates from higher education programs fares even worse, as more than half the offered positions remain empty (Wessels & Pilz, 2018) compared to 30% for the Trade Apprenticeships (Rao et al., 2014). The MSDE (2018) notes that more than 80% of all the apprentices come from the ITIs and that apprenticeships are dominantly provided in engineering, while the service sector, though an important driver of the economy, does not provide training in substantial numbers.

Theoretical Concepts of Attractiveness of VET

In many countries, the attractiveness and image of VET have been the subject of intensive policy debates over many years (see the contributions in this volume and for example the special issue in the Journal of Vocational Education and Training (Vol. 72, Issue 2, 2020) or Ratnata, 2013; Hao & Pilz, 2021), yet confusion persists about the concepts involved and the terminology used to describe them. In a report for CEDEFOP, Lasonen and Gordon (2009, p. 31) conclude that "[T]he nature of VET attractiveness is a political concern that has not been thoroughly analysed in research."

Analysis of the image of VET in the national and international literature also suggests that there is no standardised set of concepts and definitions. Discussions of 'image', for example, use a range of alternative or subordinate concepts, including 'value', 'status', 'attractiveness', 'reputation', 'recognition', 'standing', 'prestige', 'acceptance' and 'esteem'. This confusion is particularly well illustrated in a selected bibliography published by the German Federal Institute for Vocational Education and Training (BIBB) and UNESCO/International Centre for Technical and Vocational Education and Training (UNEVOC) of research into the attractiveness of VET. The literature list is a striking illustration of the immensely varied nature of the discussion that reflects sets of national, geographical and local factors that shapes how VET is valued.

We provide at least an overview of some particularly significant approaches to the attractiveness of VET. A recent study by the German Federal Institute for Vocational Education and Training (BIBB, 2015), for example, uses the concepts of 'attractiveness' and 'esteem': 'attractiveness' relates primarily to the perspective of training companies and the reasons why companies engage in training, while

'esteem' is interpreted as the view that society as a whole, and individual young people within it, have of vocational training. In his international study, Winch (2013, pp. 95–99) also uses the concept of 'attractiveness', which he interprets as the advantages that individuals can access through vocational training. In this context, parity of esteem between general and VET is of particular importance. Winch (2013) also takes an economic perspective and investigates the economic advantages that vocational training confers. So, he distinguishes the two different perspectives, that VET is attractive to nation states and its attractiveness to individuals. In the CEDEFOP report alluded to above, Lasonen and Gordon (2009) also address 'attractiveness', of which they say (p. 76): "VET attractiveness has never been defined in research literature so far, so a definition is a good place to start". Broadly, the view taken here is that of the individual, with particular reference to access to and quality of vocational training courses, Lasonen and Manning themselves (2001, p. 117) also, however, explicitly address the concept of 'attractiveness': "The terms 'attractiveness' and 'esteem' are related to behaviour or to attitudes held by individuals or groups. These are socio-psychological concepts, which in this context, except for partial interventions, go beyond the scope of our investigation. It is more appropriate, therefore, to refer to the 'standing' of vocational education, which is an objective term related to educational levels and achievements, even if complex in its social and cultural context. We can analyse essential educational aspects of the 'standing', for instance, the provision and role of vocational education as a basis and the response of the main beneficiaries of vocational education (young people; employers) as an effect".

In considering the literature in this area, CEDEFOP (2014, p. 31) concludes: "The concept of attractiveness is complex and difficult to define. Definitions in literature centre on two themes: the subjective nature of attractiveness (in the eye of the beholder), and the factors and characteristics that impact on attractiveness, programmes to the labour market, quality assurance, recognised qualifications)." We shall, therefore, distinguish here between a behavioural (i.e., subjective) approach and external factors. External factors are also addressed, with an emphasis on the role of stakeholders (CEDEFOP, 2014, p. 31): "For Leney (2004), attractiveness depends on stakeholder opinions; the concept of attractiveness implies that opinions and priorities of various stakeholders have been heard and incorporated into VET policy and programme design. Improving the quality, transparency and accessibility of the education and training on offer may raise its attractiveness, provided such measures are responsive to stakeholder needs."

In summary, there is an extremely wide divergence between the approaches taken to these issues. The concepts – which, of course, also elsewhere – can, therefore, only be interpreted contextually (i.e., locally or within nation states). Accordingly, 'attractiveness' and 'value' include a pull-factor that reflects the particular benefit that potential stakeholders – particularly the providers and potential consumers of training – derive from their involvement in training. 'Status', on the other hand, is a more general, socially-constructed term, often perceived in relation to a comparator, such as general education. Much the same is true of the concepts of 'reputation', 'standing' and 'prestige'. 'Recognition' and 'esteem', meanwhile,

allude to the policy level and to aspects such as how vocational training can achieve parity with general and higher education through regulated accreditation and certification.

To enable us to structure and reflect these different approaches, we shall take elements of a stakeholder model-oriented approach, which enables individual behaviours to be linked to external factors. Specifically, we shall be using and further refining the stakeholder approach to the benefits of VET formulated by Berger and Pilz (2010). The authors define four groups in their approach: (i) individuals seeking training; (ii) companies providing training; (iii) the labour market as an economic dimension; and (iv) society at large. With regard to the question of the image, VET enjoys, this approach can be tailored in such a way as to enable 'attractiveness' to be linked directly to an individual perspective of the sort already familiar from research into career choices (CEDEFOP, 2011a). From this perspective, 'attractiveness' may, then, also include aspects such as potential earnings, career opportunities within training companies and progression within the training system, job security (avoidance of precarious employment contracts), and "fulfilling jobs" (defined, for example, in terms of varied and challenging activities) (CEDEFOP, 2011b; Kopatz & Pilz, 2015).

'Attractiveness' may also, however, be interpreted from a company perspective. Companies rely on having skilled employees who can be deployed flexibly, so investing in training or employing skilled workers is likely to be of great economic significance to employers and companies. Only well-trained employees may be able to meet the challenges of modern production processes and complex products (Pilz & Li, 2014). The quality of VET is, therefore, a vital component of its 'attractiveness' to companies. Creating a link between pay and productivity is also important to companies: at all levels of training, pay levels must reflect employee performance in a long-time perspective (BIBB, 2015). Meanwhile, from a company perspective, vocational training processes will be 'attractive' if they generate company loyalty and, therefore, keep labour turnover within acceptable limits (Pilz & Alexander, 2011).

The attitude of society or societal sentiments must also be considered, as this shapes the national discourse about VET. In our view, the 'status' and the 'prestige' of vocational training need to be seen from a sociological perspective: the social status of individuals who have completed vocational training must be considered in relation to the status of those who have completed other kinds of education and training. In many societies, academic education and training enjoy a higher social status than VET (Young & Raffe, 1998). The reasons for this are partly historical in nature: for example, historical studies demonstrate that, in some countries, vocational training has never been as widespread as academic training and that, in some cases, it has low status and is seen as a way of supporting disadvantaged groups (Billett, 2020). Cultural and/or religious factors also play a part, for instance in the case of manual occupations in India (Singh, 2001 and see below). However, the identity of an occupational group and socialisation within that group are also crucial to 'esteem': studies of occupational structures and rituals demonstrate how important these are within the social context (Deissinger, 1997).

The public or state level is also crucial, whether because the state has authority over the regulation and inspection of vocational training or because the state itself is responsible for providing training. Another important and related perspective is that of private training providers. The crucial aspect from the state's point of view is that vocational training systems are well-regulated and transparent. This aspect is aligned with the state providing, or at least regulating, the certification of vocational qualifications (Busemeyer & Trampusch, 2012; Pilz, 2016b), enhancing its authority and making VET systems more attractive. From the point of view of the state, achieving parity of esteem between general and VET has the advantage of offering future generations a broad range of optimally differentiated educational provisions that can be built on and used as the starting point for further education and training (Young & Raffe, 1998). That is, it seeks to address the social and economic needs of the nation state. Establishing a link between vocational qualifications and employment legislation and the law on collective bargaining gives the state opportunities for influencing training as well as for generating tax and social security revenues. This is in contrast, for example, with the informal economy, where competencies are also widely acquired informally, outside of both public and private educational systems (Sodhi & Wessels, 2016; Pilz & Wilmshöfer, 2015; Gengaiah et al., 2018; Pilz et al., 2015).

From the above theoretical context of the attractiveness of VET, it is clear that there is no standard set of definitions and concepts. Therefore, we provided an overview of significant approaches to the attractiveness of the VET from national and international literature. It also discussed various aspects and actors such as individual, company, labour market and society those involved in the attractiveness of VET. The existing research findings from the perspectives of students and their parents and teachers are discussed in the next section, later on we will present results from a study focussing on the employer's perspective in detail.

Existing Research on Attractiveness of VET in India

To address this gap in understanding the bases for the attractiveness of VET in India and how it can be promoted, the central question is of how ITIs are perceived by different actors.

In a study, Ajithkumar and Pilz (2019) examined the attractiveness of ITI education among parents and students. Two interview guides were designed with the primary objective of revealing perception about attractiveness to students of ITIs pursuing trade fitter, electrician and beauty parlour, and their parents. Data were collected from students and their parents from three ITIs in (in the city of) Maharashtra state, which includes Mumbai and three ITIs (one in city and two in regional areas) in Haryana state, which surrounds Delhi. Overall, 42 students (14 girls) were interviewed, and 20 parents participated in the survey.

The analysis of the collected interview data shows that the perspective of participants of the research study are widely in line with the stakeholder approach which

dominate the perception of attractiveness. Individual attractiveness and attractiveness to labour market dominate these students' perception while social status is heavily emphasized by the parents. The data show clearly that these parent and student informants interpreted attractiveness as a complex issue often perceived in relation to a comparator, such as general education. These parents and students define a concept of attractiveness as the sum of the collective attitudes that influence individual attractiveness, social status and attractiveness to the labour market. The responses indicate that the labour market relevance of ITIs is one of the most important influences on these students' decision-making, alongside personal interest in the subject. Perceptions about the likelihood of finding employment after completing ITIs are found to be correlated with relative esteem. The perception of employment opportunities and preparation for self-employment are important criteria for seeking admission to ITIs. Many of the student-respondents associated, on the one hand, college degrees with theoretical knowledge and unemployment and, on the other hand, by contrast, ITIs to skill and earning. All the student respondents said that at the micro-level, the skills acquired from ITIs will contribute to self-sufficiency and improvement of the standard of living in rural villages or in urban settlements. They reported if they fail to get employment in industries, the skills gained through ITIs will help them start their own business. The family emerged as the most influential group in student decision-making. Most of the student-participants described having full support from their parents for the programmes as they saw it as an opportunity for employment for their children which should be pursued. But the interviewees also mentioned that public perception persists in thinking that continuing to higher education will improve one's status, while ITIs are thought to produce simple labourers. The majority of these parents considered that a university degree enjoys a higher reputation in the broader society but at an individual level they are satisfied that their children have joined ITIs and will start earning soon after completing the course. But the interview findings also revealed that there is a positive attitude among parents of these ITI students towards ITIs knowledge and its importance. The parents confirmed that they guided their sons/daughters to take a decision to join ITIs and they have found a positive reception from them. The reasons behind this reception are the high rate of unemployment among the university graduates and perceived chances of finding better job opportunities after ITI graduation, and opportunities for self-employment (Ajithkumar, 2017).

In another study, Jambo and Pilz (2018) examined the perspective of those active in the VET sector itself, and specifically that of ITI-teachers. In detail, the purpose of the study was to examine the teachers' understandings of VET's attractiveness in India in relation to their situation as teaching staff. In doing this, the individual's point of view can be opened, and self-concepts, opinions and attitudes can be explored. Data collection was undertaken in the form of semi-structured guided interviews. A total of ten ITIs were visited – four in New Delhi, three in Mumbai and three in Coimbatore. The number of teachers available for the interviews differed between the various ITIs. In total, 45 interviews were conducted. The findings show that many teachers see ITIs as an adequate alternative to other educational pathways. As main advantages, they stated the practical elements of VET and the

good opportunities for self-employment afterwards. Some of the interviewees also claimed better opportunities for ITI graduates in the labour market in comparison with university graduates, but there were other teachers who stated that university graduates have a higher reputation within society due to their education and, therefore, higher salaries afterwards. Employment opportunities for ITI graduates were perceived positively. The interviewees in this study mentioned many job opportunities and students benefitting from the job fairs and job interviews provided by the institutes. From these teachers' perspectives, students, parents and companies seem to be confident overall with the training provided at the institutes. The teachers assumed that one of the main reasons for the confidence is the fact that they do not charge high fees when compared with other educational institutions.

The study also detected the awareness of their own situation as ITI-teachers. Many of the teachers interviewed had an ITI education themselves. The salary they got paid as a teacher was often better than what they were paid or would be paid in the industry. Interviewees also liked having a teaching task that is important for society. In this context, some of the teachers did not differ greatly in educational level, age cohort or social background from their students. For instance, teaching ITI students, who generally have a lower educational background than university students, would not make a difference to the standing of the teacher. Thus, their view is that the work of ITI teachers has the same requirements and acceptance as that of other teachers. Their reaction to their profession was positive, especially because of the practical nature of the training. Some interviewees even perceived that VET had a higher standing in comparison with other reference groups, such as teachers in general education. They perceived a higher reputation because they taught in the field of VET which they believed was of higher importance. On the other hand, comments about the poor reputation of ITI teachers were also made. Reasons were the fact that vocational education had a bad standing in society. The majority of teachers considered that vocational training does not enjoy a high reputation in broader society, although it is evident that those who have completed a course of training are, at an individual level, satisfied with the employment they obtain and gain respect from their families. There is, therefore, a discrepancy here between general public opinion in India and the individual opinion of these teachers from their own experience. It is noteworthy that the teachers work predominantly with young people and their parents are from the lower social classes (see, for example, Ahmed, 2016), who take only their own situation or immediate environment as the benchmark when assessing the success of their career.

The Perspective of Companies

While previous research has focused on the individual perspective of teachers and students and their parents, the perspective of companies in relation to attractiveness has been studied only rudimentarily in India. Several studies report that companies are not satisfied with the qualification services of ITIs and they complain about the

high training need after they hire ITI graduates (Rao et al., 2014; ILO, 2003; Dar, 2008). However, a more detailed study on the assessment of the attractiveness of ITIs by companies is not yet available. Therefore, a study with precisely this specific research focus was initiated and implemented in India by the authors.

We chose to collect data from employers those recruiting ITI graduates and capture their general attitudes towards ITIs graduates as perceived by the informants. Data collection was undertaken by using a semi-structured interview guide comprising an open-ended questionnaire for the interviews with employers. The open-ended questions ensured that we gathered the required data and also with offering better scope for deeper investigation and probing (Patton, 2002).

Interviews were conducted with six large size industry human resource managers – four in Chennai, one in Coimbatore (Tamil Nadu) and one in Bangalore (Karnataka) in South India. All three cities fall under the Metropolitan category and are covered with a wide range of heavy and light industries such as electronics, telecommunications, aerospace, pharmaceuticals, automobiles, machinery manufacturing and textiles. The selection process was realized by the researchers' contacts with teachers in the ITIs in the respective regions and local partners. Two employer interviews were in person (in Chennai) and the four interviews were electronically due to the pandemic travel restrictions to other regions in 2021.

Among these six employers, two are automobiles, three are machinery manufacturing and one is electronic engineering industries. In line with a literature analysis on the VET attractiveness by employers, we adapted the stakeholder approach developed by Berger and Pilz (2010) and already transferred to the Indian context by Ajithkumar and Pilz (2019) (see above). The two major elements from an employer's perspective "Skilled and versatile employees (high-quality training)" and "Cost-effective pay (related to productivity)" had been operationalized and transferred into interview questions by the following categories: quality of ITI graduate employees, career opportunities for ITI graduates in the labour market, quality of training provided in ITI, cost factors in employing ITI graduates. The questions include questions directly addresses special aspects like, "What are the reasons your company hires ITI graduates?" or "If you employ ITI graduates, are you satisfied with the quality of training received by them?" and more open questions relating to the overall topic like "What are the strengths and weaknesses of ITI education in your opinion?" or "If you compare the status of a diploma degree and an ITI degree or academic degree, what is the difference and why?"

All the interviews were recorded with the consent of interviewees. The recordings were transcribed and analyzed manually by the researchers.

Results and Discussion

The findings of the employer interviews revealed that employment opportunities for ITI graduates are perceived positive attitude, better career opportunities among all the interviewed employers and also the ITI graduates have a high demand for in the

market. Further, a majority of the interviewees mentioned the issue of supply and demand of VET graduates in the labour market. For instance, a large number of diploma and engineering graduates are employed at the level and/or position of ITI graduates which indicates the supply-side constraints and poor quality of ITI graduates and the employability of diploma and engineering graduates. It becomes clearer from our employers interviews that employer(s) also view ITIs as low standing when compare to general education. The findings of the study are described and discussed under four key thematic areas: (i) Career Opportunities, (ii) Employability and Training Quality, (iii) Low standing of VET and (iv) Economic factors in the following section.

Career Opportunities

The interviews with the employers revealed that the ITI graduates have better opportunities in the labour market in comparison with the diploma and university graduates. ITI graduates have higher demand in the labour market upon completion of the course successfully.

Yes, 100 percent they have demand in the job market. Even compare to engineering graduates, ITI students have a lot of scope in the job market. (HR Manager, Automobile-1, Bangalore)

On the other hand, employers stated that sourcing ITI graduates itself is a challenging task for companies as the ITI graduates are in high demand in the market, for example:

In the labour market, they (ITI graduates) have a lot of benefits and job opportunities, currently getting the ITI apprentices itself is very difficult. Next year we want around 1600 ITI candidates, but it is a very difficult job to source them. (HR Manager, Engineering-1, Bangalore)

One of the main reasons for difficulty in getting ITI graduates is due to supplydemand issues which make employers especially in large companies, recruit ITI graduates, even without assessing their skills and knowledge and only for temporary use. One employer stated:

Only 50 per cent of the ITI trainees pass and come out (from ITIs). The pass out (rate) is very less now. So, most of the companies will go directly to ITIs and recruit persons from the ITI institute itself. They are not doing any interviews, they will go and what are the persons available, they will take and use for their industry. (HR, Manager, Manufacturing 2 – Chennai)

The employer interviews revealed that, on the one hand, employment opportunities for ITI graduates are perceived to promote a positive attitude among the employers that there are better career opportunities and high demand in the market. Better career opportunities have been considered as one of the indicators of parity of esteem (Jambo & Pilz, 2018). In the labour market outcomes, it is evident that vocational education provides a smooth transition into jobs early in the career attributes to a positive evaluation of the VET system (Di Stasio, 2017). Nevertheless, a

negative attitude may emerge as a result of the lack of desired career progression that VET students may experience later in their life (Russo et al., 2019, p. 3). Such issues mainly arise for example, when the ITI graduates are not equipped with skills needed by the employers, that impacts upon their employability and prospects for promotion.

Despite, the ITI graduates has better employment opportunities and demand in the labour market, they are lack in acquisition of knowledge and skills which is one of the most crucial determinant factors for employability (Neroorkar & Gopinath, 2020). Therefore, the major aspects of quality of training received by ITI graduates and skill mismatch problems are discussed in the following section in detail.

Employability and Training Quality

The companies in which the interviews were conducted are providing in-house training to their newly recruited ITI graduates for a stipulated period as they are not skilled enough to be deployed immediately in the production units. A HR manager from the automobile industry said:

We are giving the training more than whatever is required. We have our manufacturing process, but whatever the quality of the student getting, it is not enough to cater our requirements. Skill level is very less, (...) we are giving them one-week training and we are engaging them in the production line. (HR Manager, Engineering 1, Bangalore)

The correspondence between VET and the labour market rests largely on the knowledge and skill that VET transfers to the students and then in turn into the labour market (Tejan & Sabil, 2019). But, VET is unable to adequately address the issue of employability and inadequately prepare young people for the labour market.

The ITI graduates are reported to be lacking in both theoretical knowledge as well as practical skills. The employers stated that ITIs do not have the required infrastructure to train their students adequately or in ways that make them ready for employment upon graduation. They are reported to gain more knowledge and skill only when they are doing the apprenticeship in companies. Further, these HR managers claim that ITIs lacks in training infrastructure need for students. For example, many of the ITIs does not have proper workshops (Tara et al., 2016).

So, they (ITI graduates) are not strong at theoretical as well as not strong in practical. They are getting more experience while they are coming for the apprenticeship training in companies. Many ITI does not have the proper infrastructure. (HR Manager, Manufacturing 1, Coimbatore)

Another employer stated that ITI graduates are lacking job readiness and lacking in technical know-what and know-how. The ITI students are hardly getting practical learning at their institutes, it was claimed.

They are not ready for industrial fitment. If it is machining, they are not aware of what kind of machine they operating, they do not have any exposure during their institution on practical. They are first time coming and see the machines. So, they do not know how to operate the machines itself. (HR Manager, Manufacturing 1, Coimbatore)

According to human capital theory, employability represents a means for the individual to improve their attractiveness to the labour market (Berntson et al., 2006). The majority of the employers interviewed, mentioned that the quality of training received by ITI graduates was very poor in relation to their enterprises' needs. Similar findings in other studies (see Mehrotra, 2014; Kumar, 2016), traced students who graduated from VET institutions lack application-oriented knowledge, practical skills and find difficulties to meet the demand of industrial skills and a resulted that ITI graduates being unemployed. It mirrors the factors that most of the VET institutions do not have standards and are heavy theory centred rather than practical components (Tara et al., 2016). However, ITI graduates who undergo apprenticeship training in companies have the opportunity to get hands-on practical training, exposure to working in a company, knowledge of company work culture and the latest technology (Tomlinson, 2012; Neroorkar & Gopinath, 2020).

Further, employers' interviews have revealed that a growing proportion of diploma and engineering graduates are undertaking forms of employment that are not commensurate to their level of education and skills. This raises the issue of the balance of supply and demand of VET graduates in the labour market. This situation prevails due to the poor supply of graduates from the ITIs and the employability of diploma and engineering graduates. It also raises concern about the greater potential for displacement between levels of education and occupational position. Consequently, the diploma and engineering graduates may also experience a potential mismatch between their qualifications and their returns in the job market (Tejan & Sabil, 2019; Schneider & Pilz, 2019).

Nowadays we are getting a greater number of Engineering graduates and diploma holders, but ITI (graduates) are quite difficult to attract them to industry. The number of enrolments (in ITIs) is also coming down year by year. (HR Manager, Manufacturing 1, Coimbatore)

The lack of availability of ITI graduates in the market and the oversupply of technical engineering graduates and diploma holders who failed to meet the skill needs of the industry in their respective fields are pushed to undertake manual work and are placed in a low-level employment position in the company.

Now even Engineering people are working as 'operators', working as an apprentice. Because we have huge skill gap. The pass out ITI (students), the percentage is declining year on year. So, to bridge those skill shortages, diploma graduates or engineering graduates were hired as operators and given them ITI salaries. (HR Manager, Manufacturing 2, Chennai)

So, it is suggested that the expansion of higher education has produced numerous graduates, but the majority of them lack the skills needed for acquiring jobs in the labour market (Khare, 2016). Another consequence of such higher education on a mass scale is leading to declining economic returns for graduates (Winch, 2013; Khare, 2016). This can be illustrated by the following statement from a HR manger.

For one position, I may recruit three ITI trainees. So, the ratio may differ for each company. But I may not have so many ITI people, What I do is I recruit a diploma person or engineering person for that ITI position, I train them and I give them ITI salary. (HR Manager, Automobile 2, Chennai)

The VET system in India, as argued by experts has been supply-driven and demandside constraints are not adequately addressed (see Singh, 2012; World Bank, 2008; Mehrotra, 2014). Further, the mismatch between the skill requirements of employers and the skill base of job seekers triggers employment problems, which was acknowledged in the interview data from the HR managers.

(University) Graduates are getting in large numbers where the requirement is very low. If you see, the demand for ITI is large but the supply is very low. It's a vice-a-versa. (HR Manager, Manufacturing 1, Coimbatore)

Cooperation between education institutions and companies is likely to be necessary for quality improvement and the development of the study programs and practical skills in a real production environment (Kantane et al., 2015). For example, one HR stated:

Some of the industry gives training directly to them, also providing infrastructure and other facilities. They are providing training and also recruiting directly from the same ITI. I think some of the ITI does not have the facilities. (HR Manager, Automobile 3, Chennai)

In India, around 60% of the government ITIs have been adopted by corporate companies under the public-private partnerships scheme (Neroorkar & Gopinath, 2020). The companies often upgrade the infrastructure and provide training in the latest technology and other assistance to the ITIs. Such measures may help ITIs up-to-date industry needs, advancement in technologies, bringing in new methods and knowledge can be imparted to ITI graduates. The ITIs partnership with industries at the local can assist VET provision more effectively meets local needs and increase its efficiency and attractiveness it is proposed by a supra-government agency (CEDEFOP, 2014).

To sum up: One of the biggest problems that India faces is skill mismatch; many industries are suffering from a lack of skilled workers and this skill mismatch leads to entrenched levels of unemployment (Sanghi & Srija, 2014). Further, a general lack of connection between the training institutes and industry leads to a lack of exposure to modern technologies among trainers and instructors. However, the perception of employability is likely to depend on the economic situation and particularly the supply of jobs in the labour market and employment mobility. The above discussion becomes clear that many employers are hiring ITI graduates as apprentice trainees and provide them in-house training for a period of 1-2 years. It was also observed that companies had more opportunities to train their employees in a corporate training center. Small and medium companies, however, mostly trained their new employees through on-the-job training mode due to limited training facilities and cost factors besides the fact that such enterprises expected their employees to familiarize in their work as quickly as possible. Having discussed aspects affecting the companies more directly, the interview partners also reflect some issues on a more general basis, including the perspectives of the other stakeholders and also from a society's perspective in general. We summarize these opinions under the term of "low standing of VET".

Low Standing of VET

These employer representatives also view ITIs as low standing in comparison to other general education and ITI graduates are only meant to perform the manual work, are placed in the lower work position and treats as blue-collar workers in the company. This reflection is similar to other stakeholders: students, parents and teachers (see existing research findings discussed above). From the perspective of HR managers interviewed, in most cases, the employers seeking workers must either focus on a relatively small group of more theoretically qualified ITI graduates or on unskilled assistants who cannot accept challenging tasks. For example, the HR manager states as follows:

The ITI mostly is related to helper work only. So, it's kind of low level of work in the company, they have to do the basic work. So ITI persons only will fit those positions. (HR Manager, Automobile 1, Chennai)

These findings also illuminate some divisions in the perceptions of students and the companies.

They want to be a supervisor or as an engineer and they do not want to be a blue-collar worker. In ITI mostly, we treat them as blue-collar workers, any of our people do not like that. (HR Manager, Manufacturing 1, Coimbatore)

Often, parents are one of the most influential factors in student's decision in joining ITIs (See Ajithkumar & Pilz, 2019) as they believe that their children those poor in academics will have a better career opportunity on completion of ITI course and will also support the family by their earnings. For example, one HR manager mentioned:

Because, they are scoring the lowest mark, they are not getting the opportunity to study 11th or 12th, due to their family situation they are joined ITI. If they completed ITI, they will go for labour work like driver or helper. They have no ambition, no purpose to study ITI. Only below 10 per cent having the ambition to do ITI. 90 per cent of students are pushed to ITI. There are no options for them. (HR Manager, Automobile 1, Chennai)

Students who have less academic performance ability and hails from lower social-economic backgrounds are mostly take up vocational education and often, their parents were less educationally qualified (Kumar et al., 2019). The above quote affirms that VET is viewed as an option for those without the ability to progress to higher education (Billett, 2020). It is implicit that VET is perceived as a negative perception in society (Ajithkumar & Pilz, 2019). This perception correlates with these employers' views as well. In this context, HR managers also offered some measures to enhance the standing of VET:

The image of ITI can be improved by continuous broadcasting of the success stories of students and alumni, available career opportunities and demand in the labour market. (HR Manager, Automobile 2, Chennai)

The majority of companies are engaging the ITI students for down-level work due to the attitude and behaviour of the students are not up to the level. So, if include the aspects like personality development and behavioural things in the ITI syllabus and as well as

in-company initial training, it will help them (ITI graduates) to improve their image at all levels (HR Manager, Automobile 1, Chennai)

From many studies, it has become clear that vocational training and trained labourers will be accepted in the future only if the social opinion regarding manual workers changes; in particular, this has to be reflected in their pay and career prospects (Pilz, 2016c). In contrast, the interviews with HR managers portrayed that employers are merely more concerned about economic factors like cost and productivity which are discussed in the section below.

Economic Factors like Productivity

All the interviewed employers emphasized the economic benefits to the company by hiring ITI graduates. Mostly, they reported employing ITI graduates as apprentice training for a low salary in comparison to their permanent employees.

For regular employees, we are paying a higher salary. For ITI apprenticeships we are paying a stipend which is less than the regular and permanent employees' salary. We are imparting world-class training to the ITI apprenticeship candidates, so it is a win-win situation for both of us. (HR Manager, Automobile-1, Bangalore)

An employer spends a lot of investment to develop the human capital of workers to master the skills required in the companies. However, the above quote illustrated that the company provides quality training to the ITI apprentices rather than paying them a higher salary (Singh & Parida, 2020). It implies that ITI graduates have the opportunity to learn specialized skills which might not be taught at the ITIs. Nevertheless, as has been seen in the preceding section, some companies employ ITI graduates to work merely as helpers or loaders, else doing only manual work rather than trade-related skilled work (Neroorkar & Gopinath, 2020).

It is noteworthy that no employer interviewed, desired to hire the ITI graduates permanently which may likely incur more costs to the company.

I can pay only the minimum wages as per the (apprentice) act. I am getting the candidates available in the market. They all are freshers. Prior times, based on the experiences, their knowledge and skills, their remuneration also getting increased and also it benefits to the organization. (HR Manager, Automobile 2, Chennai)

Employers tend to find ITI graduates available in the market and those graduates are also ready to accept to work for what the employers pay them. This situation is due to a lack of employability and/or increased supply of ITI graduates. Consequently, labour market returns of graduates appear to be quite low (Ahmed, 2016).

One HR manager from the manufacturing industry is concerned about the duration of apprenticeship training which the ITI graduates receive in the form of onthe-job training. They can get the return on investment only after they productively contribute to the company and returns to the company.

Because we are investing a minimum of six months on them, so the return on investment will be getting if they exceeding six to nine months. So, the scrap rate will be higher and the

rate of productivity will be lower. Whereas we paying a stipend to them. It's again we are investing in people. (HR Manager, Manufacturing 1, Coimbatore)

The skills that the ITI graduates get does not equip them with the skills that employers seeking. The empirical evidence on the role of on-the-job training and the returns from it is very limited in India (Bhandari, 2021). However, those decisions are made by companies, this can be illustrated by the quote below:

There are organizations where their motive only will be production. So, when the company's objective is only about productivity, or it's only about revenue or profit which is the method that most of the Indian companies follow. I am not blaming anyone, just saying the fact. (HR Manager, Automobile 2, Chennai)

Another factor that tends these employers reluctant to make ITI graduates as permanent employees are to avoid legal issues like formation union as well as other related consequences such as disruption company functioning, their productional process also may get affected. The two following quotations document this aspect very clearly.

If I have permanent employees, in future he may create a union and with this union, they will have a lot of charts of demands. So, to cut all these aspects, this temporary workforce will provide me with some relief and they will give me a product which is very cost-effective. (HR Manager, Automobile 2, Chennai)

I think you heard of lockout and strike and all. Previously they were doing lockout and strike everything year on year. Earlier we were thinking of hiring ITI candidates as permeant employees. But, because of these issues, we have changed our mindset and planning to ITI candidates as apprentice training. After their apprentice training, they will be replaced by a new batch. (HR Manager, Manufacturing 1, Chennai)

Over the last decade, the private sector has played an instrumental role in driving the demand-led skill development system in India. Addressing the challenge of increasing the enrolment capacity in VET would require collaborative actions among government and private stakeholders and effective linkages between prospective employers and Vocational Training Providers (Mehrotra, 2016). However, as Winch (2013) argue, employers are likely to invest in VET if there is a positive economic return. Also, Winch is doubtful that even in a such case of the business strategy of employers, it will not consistent with extensive investment in VET (Winch, 2013, p. 102).

Nevertheless, this kind of viewpoint depends on the company policy and those focusing beyond economic benefits like employees' welfare and people-focused. For example:

That depends on the companies' policy. See, some company which is very people-centric or very good employee policy, these companies once after the three years they complete two years they will give them opportunities permeant employees and newly established companies. Like example, Yamaha which is new company eight years back, so people who joined there as a three-year trainee they would have been made permanent. (HR Manager, Automobile 2, Chennai)

Employers' tendencies towards taking apprenticeships for a stipulated period time or specific types of ITI graduates perhaps reflects entrenched from more transactional, cost-led and short-term approaches to developing human resources (Tomlinson, 2012). Further, training for new ITI graduates, in particular, is expensive (Pilz & Pierenkemper, 2014), even if the employer invests in training may not be resulted in a profit due to poaching of trained employees by other employers offering them higher wages (Winch, 2013). Good remuneration for ITI graduates is more likely to enhance its status and attractiveness than relatively poor remuneration. In contrast, as discussed in the beginning of this section, the employer interviews demonstrated that newly recruited ITI graduated are paid less salary than their permeant employees and are more concerned about cost and productivity.

Conclusions

Similar to the other findings on attractiveness from the perspective of students and their parents as well as teachers, our study of employers' perspective of also shows that the quality of vocational training in combination with employability and thus pay as well as career opportunities in the job market are important aspects of attractiveness.

As the cost of developing human capital is increasing, consequently, the employers expect educational institutions to produce graduates with employability skills that are required by the market without additional training from the industry (Husain et al., 2010). But our employers' interview further confirms the quality of training the ITI graduates received in ITIs were not matching their companies' needs, because the graduates lack practical skills to perform on the job perceived negatively among employers. However, the employers' interviews revealed that companies are primarily concerned with economic rather than educational factors. Therefore, employers neither favoured to invest in training and not getting skilled employees in the longer run. They mostly hire ITI graduates with minimum salary and does not want them to retain more than the apprentice period time due to high cost to the employees. As Winch (2013) argue the salary and status are closely related worldwide, so when the ITI graduates are paid with poor salary by companies it is implicit that they are perceived low status in the labour market.

As mentioned in the previous sections, VET programmes are perceived as low-status manual work and low-paying employment in India (Agrawal, 2012). Therefore, the ITIs should interface with industry will be promoted to improve the employability of the trainees. The demand-driven curricula should be developed in consultation with industry representatives, experts and academia by the competent bodies, to providing quality training and gainful employment in line with the latest market trends as a measure to enhance the attractiveness of VET (Zenner et al., 2017). The VET teachers and trainers also are important facilitators of learning and role models of their occupations of young people. Thus, the status of VET teachers is also related to the attractiveness of VET and needed measures should be taken in this context (Lasonen & Manning, 2001; Pilz & Gengaiah, 2019; Pilz et al. 2022). In addition, initiatives such as, for example, the support of ITIs through better

equipment and higher teaching capacities may be one approach to lead to the qualitative improvement of vocational education processes (Jambo & Pilz, 2018). With the support of the World Bank, the Government of India many government ITIs have been upgraded into so-called Centres of Excellence (COE) at the national level (Rao et al., 2014). Under this program, appropriate infrastructure and equipment are provided. Further, the program has the overall strategy of enlisting cooperation with Industry and Chamber of Commerce and to creating a public-private partnership model for designing and implementing the scheme. The salient features of the scheme of upgrading ITIs include the introduction of multi-skilling courses of oneyear duration followed by advanced/specialized modular courses through an industry approach with multi-entry and multi-exit provisions. Most ITIs impart training in engineering trades like instrument mechanic, electrician, fitter, plumber, turner, welder, etc. Establishing Public Private Partnership in the form of Institute Management Committees (IMCs) is envisaged to ensure greater and active involvement of industry in various aspects of training (Tara et al., 2016). Besides the enhancing of vocational training institutions itself, our findings show clearly the need for long-term changes in the labour market. For example, the Government needs to establish or at least support firm progression routes through initial vocational training in combination with continuing vocational education and training (Badrinath, 2016). The upgrading of skills by continuing vocational education might help to fill gaps of skilled workers and also enhance earnings. Both aspects can support the growing standing of vocational education and training in India.

Furthermore, emphasise should be placed on improving the attractiveness of VET: good governance of VET system and providers in terms of responsiveness to the needs of individual and labour market, highly qualified trainers, better quality assurance active participation of all the key stakeholders. Indian policymakers have realised the potential of vocational education and have introduced reforms and increased the size and scope of the ITI-sector (Kumar, 2016; Chakrabarti, 2016). Here we can only focus on one example, focussing directly on the situation in ITIs.

The findings from this employer-perception study require careful interpretation because the data were collected from a small sample of employers only across two states in south India. Also, employer interviews offer only limited perspective and the qualitative methods also has limitations. Thus, the collected data and the findings may not reflect as same those from the other parts of the country. Therefore, more research in this field is needed with a large sample including the different sizes of companies and covering other regions in India. Besides, the reasons for the low standing of Indian vocational training courses in society and the labour market can be traced to several socio-cultural and historical factors. In India, traditionally the VET system has been supply-and government-driven, with very little involvement of the private sectors. Reforms are needed to bring more active industry participation in VET to ensure the quality of training and responsiveness to industry demands (Mehrotra, 2014). Nevertheless, it is possible to propose that factors such as decent and well-regarded occupations, prospects of employment are likely to be elements that will attract the stakeholders and retain interest (Billett, 2020).

Also, the explorative study described here might be a first attempt to fill the existing research gap in the field and can improve the reflection on the status and reputation of VET in other regions in India and even in other countries.

References

- Agrawal, T. (2012). Vocational education and training in India: Challenges, status and labour market outcomes. *Journal of Vocational Education & Training*, 64(4), 453–474. https://doi.org/10.1080/13636820.2012.727851
- Agrawal, T. (2014). Skill development in India: An examination. *Journal of Education and Work*, 27(6), 629–650. https://doi.org/10.1080/13639080.2013.787485
- Ahmed, T. (2016). Socio-economic impact of VET: Are students interested in joining vocational education and training in India: In the context of skilling mission in India. In M. Pilz (Ed.), *India: Preparation for the world of work Education system and school to work transition* (pp. 321–344). Springer VS.
- Ajithkumar, U. (2017). A study of the problems faced by ITIs in India as perceived by different stakeholders. In U. C. Okolie & A. M. Yasin (Eds.), *Technical education and vocational train*ing in developing nations (pp. 151–176). IGI global.
- Ajithkumar, U., & Pilz, M. (2019). Attractiveness of Industrial Training Institutes (ITI) in India: A study on ITI students and their parents. *Education and Training*, 61(2), 153–168. https://doi.org/10.1108/ET-04-2018-0102
- Badrinath, V. (2016). Further education and training, retraining: Skilful India A dream or reality. In M. Pilz (Ed.), *India: Preparation for the world of work – Education system and school to work transition* (pp. 231–259). Springer VS.
- Berger, S., & Pilz, M. (2010). Benefits of VET. In U. Hippach-Schneider & B. Toth (Eds.), VET research report Germany (ReferNet Research Report 2009, pp. 6–49). BIBB.
- Berntson, E., Sverke, M., & Marklund, S. (2006). Predicting perceived employability: Human capital or labour market opportunities? *Economic and Industrial Democracy*, 27(2), 223–244. https://doi.org/10.1177/2F0143831X06063098
- Bhandari, B. (2021). *The 3–E challenge: Education, employability, and employment* (NCAER Working Papers 122). National Council of Applied Economic Research.
- BIBB. (2015). Attraktivität der dualen Berufsausbildung in Verbindung mit der Funktion betrieblichen Ausbildungspersonals: Ergebnisse einer qualitativen Studie. BIBB.
- Billett, S. (2020). Perspectives on enhancing the standing of vocational education and the occupations it serves. *Journal of Vocational Education & Training*, 72(2), 161–169. https://doi.org/10.1080/13636820.2020.1749483
- British Council. (2016). Overview of India's evolving skill development landscape. British Council. https://www.britishcouncil.org/sites/default/files/18.10.16_overview_of_skill_landscape.pdf
- Busemeyer, M., & Trampusch, C. (2012). The comparative political economy of collective skill formation. In M. Busemeyer & C. Trampusch (Eds.), *The political economy of collective skill formation* (pp. 3–38). Oxford University Press.
- CEDEFOP. (2011a). Vocational education and training is good for you: The social benefits of VET for individuals. Publications Office of the European Union.
- CEDEFOP. (2011b). *The economic benefits of VET for individuals*. Publications Office of the European Union.
- CEDEFOP. (2014). Attractiveness of initial vocational education and training: Identifying what matters. Publications Office of the European Union.
- Chakrabarti, R. (2016, July 9). Skill India or Kill India: How to cope with the impending Demographic Deluge. Times of India. Retrieved September 25, 2017, from https://blogs.

- timesofindia.indiatimes.com/toi-edit-page/skill-india-or-kill-india-how-to-cope-with-the-impending-demographic-deluge/
- Dar, A. (2008). Skill development in India: The vocational education and training system (Working Paper No. 22). World Bank.
- Deissinger, T. (1997). The German dual system A model for Europe? *Education and Training*, 39(8), 297–302. https://doi.org/10.1108/00400919710190090
- Di Stasio, V. (2017). 'Diversion or safety net?' Institutions and public opinion on vocational education and training. *Journal of European Social Policy*, 27(4), 360–372. https://doi.org/10.1177/2F0958928717719199
- Gengaiah, U., Li, J., Hanvatananukul, S., Prontadavit, N., & Pilz, M. (2018). Skill development in the informal sector in China, Thailand and India A case study of street food vendors. *TVET*@ asia, 10, 1–21. http://tvet-online.asia/wp-content/uploads/2020/03/gengaiah_etal_tvet10.pdf
- Hao, T., & Pilz, M. (2021). Attractiveness of VET in China: A study on secondary vocational students and their parents. *Journal of Education and Work*, online first. https://doi.org/10.1080/ 13639080.2021.1946492
- Husain, M. Y., Mokhtar, S. B., Ahmad, A. A., & Mustapha, R. (2010). Importance of employability skills from employers' perspective. *Procedia-Social and Behavioral Sciences*, 7, 430–438. https://doi.org/10.1016/j.sbspro.2010.10.059
- ILO (International Labour Organization). (2003). *Industrial Training Institutes of India: The efficiency study report*. ILO South Asia. https://vital.voced.edu.au/vital/access/services/Download/ngv:1141/SOURCE2
- Jambo, S., & Pilz, M. (2018). Perceptions of teachers in Industrial Training Institutes: An exploratory study of the attractiveness of vocational education in India. *International Journal of Training Research*, 16(1), 4–18. https://doi.org/10.1080/14480220.2017.1403945
- Kantane, I., Sloka, B., Buligina, I., Tora, G., Busevica, R., Buligina, A., Dzelme, J., & Tora, P. (2015). Expectations by employers on skills, knowledge and attitudes of employees. *European Integration Studies*, 9, 224–234. https://doi.org/10.5755/J01.EIS.0.9.12809
- Khare, M. (2016). Higher education/university: Taking the skills march forward in India Transitioning to the world of work. In M. Pilz (Ed.), *India: Preparation for the world of work Education system and school to work transition* (pp. 103–139). Springer VS.
- Kopatz, S., & Pilz, M. (2015). The academic takes it all? A comparison of returns to investment in education between graduates and apprentices in Canada. *International Journal for Research* in Vocational Education and Training, 2(4), 308–325. https://doi.org/10.13152/IJRVET.2.4.4
- Kumar, K. (2016). ITIs/ITCs: Industrial Training Institutes/Industrial Training Centres. In M. Pilz (Ed.), India: Preparation for the world of work – Education system and school to work transition (pp. 65–80). Springer VS.
- Kumar, R., Mandava, S., & Gopanapalli, V. S. (2019). Vocational training in India: Determinants of participation and effect on wages. *Empirical Research in Vocational Education and Training*, 11(3), 1–17. https://doi.org/10.1186/s40461-019-0078-y
- Lasonen, J., & Gordon, J. (2009). Improving the attractiveness and image of VET. In CEDEFOP (Ed.), Modernising vocational education and training: Fourth report on vocational training research in Europe: Background report (pp. 15–88). Office for Official Publications of the European Communities.
- Lasonen, J., & Manning, S. (2001). How to improve the standing of vocational compared to general education. In P. Descy & M. Tessaring (Eds.), *Training in Europe: Second report on vocational training research in Europe: Background report* (Vol. I, pp. 115–167). Office for Official Publications of the European Communities.
- Leney, T. (2004). Achieving the Lisbon goal: The contribution of VET: Final report to the European Commission. QCA Qualifications and Curriculum Authority.
- Marsden, D., & Ryan, P. (1995). Work, labour markets and vocational preparation: Anglo-German comparisons of training in intermediate skills. In L. Bash & A. Green (Eds.), *Youth, education* and work [World yearbook of education 1995] (pp. 67–79).

- Mehrotra, S. (2014). From 5 to 20 million a year: The challenge of scale, quality and relevance in India's TVET. *Prospects*, 44(2), 267–277. https://doi.org/10.1007/S11125-014-9305-2
- Mehrotra, V. S. (2016). NVEQF: Skill development under the national skills qualifications framework in India. Imperatives and challenges. In M. Pilz (Ed.), *India: Preparation for the world of work. Education system and school to work transition* (pp. 281–310). Springer.
- MSDE (Ministry of Skill Development and Entrepreneurship). (2018). *Annual Report 2017–18: Progressing towards an empowered India*. Government of India. https://msde.gov.in/sites/default/files/2019-09/Annual%20Report%202017-2018%20%28English%29.pdf
- Neroorkar, S., & Gopinath, P. (2020). Impact of Industrial Training Institutes (ITIs) on the employability of graduates A study of government ITIs in Mumbai. *Journal of Vocational Education* & *Training*, 72(1), 23–46. https://doi.org/10.1080/13636820.2019.1575895
- Patton, M. Q. (2002). Qualitative research and evaluation methods (3rd ed.). Sage.
- Pilz, M. (2016a). Training like at home or like the domestic competitors? A study of German and Indian companies in India. In A. Yasin & R. B. Shivagunde (Eds.), *Emerging trends in Technical and Vocational Education and Training (TVET)* (pp. 2–14). Lenin Media.
- Pilz, M. (2016b). Typologies in comparative vocational education: Existing models and a new approach. Vocations and Learning, 9(3), 295–314. https://doi.org/10.1007/s12186-016-9154-7
- Pilz, M. (2016c). India: Preparation for the world of work Education system and school to work transition. Springer VS.
- Pilz, M., & Alexander, P.-J. (2011). The transition from education to employment in the context of social stratification in Japan A view from the outside. *Comparative Education*, 47(2), 265–280. https://doi.org/10.1080/03050068.2011.555115
- Pilz, M., & Gengaiah, U. (2019). Teacher training education for VET teachers in India. In S. McGrath, M. Mulder, J. Papier, & R. Suart (Eds.), *Handbook of vocational education and training* (pp. 1733–1746). Springer.
- Pilz, M., & Li, J. (2014). Tracing Teutonic footprints in VET around the world? The skills development strategies of German companies in the USA, China and India. European Journal of Training and Development, 38(8), 745–763. https://doi.org/10.1108/EJTD-10-2013-0110
- Pilz, M., & Pierenkemper, D. (2014). Apprenticeship programs-Lessons from Germany & German companies in India. *Indian Journal of Industrial Relations*, 49(3), 389–400.
- Pilz, M., & Wilmshöfer, S. (2015). The challenges of formal, non-formal and informal learning in rural India: The case of fishing families on the Chilika Lagoon, Orissa. *PROSPECTS: Quarterly Review of Comparative Education*, 45(2), 231–243. https://doi.org/10.1007/s11125-015-9338-1
- Pilz, M., Gengaiah, U., & Venkatram, R. (2015). Skill development in the informal sector in India: The case of street food vendors. *International Review of Education*, 61(2), 191–209. https://doi.org/10.1007/s11159-015-9485-x
- Pilz, M., Schlögelmann, A., & Gengaiah, U. (2022). VET Teachers and Teacher Trainers in India. In S. Loo (Ed.), *Teacher Educators in Vocational and Further Education* (pp. 13–27). Springer.
- Rao, K. S., Sahoo, B. K., & Ghosh, D. (2014). The Indian vocational education and training system: An overview. In S. Mehrotra (Ed.), *India's skills challenge: Reforming vocational education and training to harness the demographic dividend* (pp. 37–85). Oxford University Press.
- Ratnata, W. I. (2013). Enhancing the image and attractiveness of TVET. *TVET@asia*, *1*, 1–13. http://tvet-online.asia/wp-content/uploads/2020/03/ratnata_tvet1.pdf
- Russo, G., Sarafini, M., & Ranieri, A. (2019). Attractiveness is in the eye of the beholder. *Empirical Research in Vocational Education and Training*, 11(7), 1–22. https://doi.org/10.1186/s40461-019-0082-2
- Sanghi, S., & Srija, A. (2014). Youth unemployment in India. In Confederation of Indian Industry (Ed.), *Economy matters* (Issue 1, Feb. 2014, pp. 33–38). Confederation of Indian Industry. https://ies.gov.in/pdfs/sunita-sanghi-and-a-srija.pdf
- Saxena, P. K., & Gandhi, A. (2014). Reforming apprenticeship training. In S. Mehrotra (Ed.), India's skill's challenge. Reforming vocational education and training to harness the demographic dividend (pp. 129–176). Oxford University Press.

- Schneider, S., & Pilz, M. (2019). The function and institutional embeddedness of polytechnics in the Indian education system. *International Journal for Research in Vocational Education and Training (IJRVET)*, 6(3), 284–308. https://doi.org/10.13152/IJRVET.6.3.5
- Singh, M. (2001). Reflections on colonial legacy and dependency in Indian vocational education and training (VET): A societal and cultural perspective. *Journal of Education and Work*, 14(2), 209–225. https://doi.org/10.1080/13639080120056664
- Singh, M. (2012). India's national skill development policy and implications for TVET and lifelong learning. In M. Pilz (Ed.), *The future of vocational education and training in a changing world* (pp. 179–211). Springer VS.
- Singh, S., & Parida, J. K. (2020). Employment and earning differentials among vocationally trained youth: Evidence from field studies in Punjab and Haryana in India. *Millennial Asia*. Online first December 2020. https://doi.org/10.1177/0976399620964308
- Sodhi, J., & Wessels, A. (2016). Informal learning: Education and skill development in India's informal sector. In M. Pilz (Ed.), *India: Preparation for the world of work – Education system* and school to work transition (pp. 261–279). Springer VS.
- Tara, N. S., Kumar, N. S. S., & Pilz, M. (2016). Quality of VET in India: The case of Industrial Training Institutes. *TVET@asia*, 7, 1–17. http://www.tvet-online.asia/issue/7/tara-etal
- Tejan, O. A., & Sabil, A. (2019). Understanding employers' perception of employability skills and career development in Morocco. *International Journal of Education and Literacy Studies*, 7(2), 134–138. https://doi.org/10.7575/AIAC.IJELS.V.7N.2P.134
- Tomlinson, M. (2012). Graduate employability: A review of conceptual and empirical themes. *Higher Education Policy*, 25, 407–431. https://doi.org/10.1057/hep.2011.26
- UNDP (United Nations Development Program). (2019). *Human development report 2019*. UNDP. http://hdr.undp.org/sites/default/files/hdr2019.pdf
- UNEVOC (International Centre for Technical and Vocational Education and Training). (2018).
 TVET country profile: India. UNESCO-UNEVOC. https://unevoc.unesco.org/wtdb/worldtvetdatabase_ind_en.pdf
- Wessels, A., & Pilz, M. (2018). India. In P. Grollmann, D. Frommberger, U. Clement, T. Deißinger, U. Lauterbach, M. Pilz, & G. Spöttl (Eds.), *International handbook of vocational education and training* (Issue 50, Vol. 24). Federal Institute for Vocational Education and Training.
- Winch, C. (2013). The attractiveness of TVET. In UNESCO-UNEVOC (Ed.), *Training, revisiting global trends in TVET: Reflections on theory and practice* (pp. 86–122). UNESCO.
- World Bank. (2008). Skill development in India: The vocational education and training system (South Asia human development sector series, Report No. 22). World Bank. http://documents1.worldbank.org/curated/en/798621468041438738/pdf/423150India0VET0no02201P UBLIC1.pdf
- World Bank. (2017, December 13). Government of India and World Bank sign agreement to give impetus to India's skill's agenda (Press release). World Bank. Retrieved August 3, 2021, from https://www.worldbank.org/en/news/press-release/2017/12/13/government-india-world-bank-sign-agreement-give-impetus-indias-skills-agenda
- Young, M., & Raffe, D. (1998). The four strategies for promoting parity of esteem. In J. Lasonen & M. Young (Eds.), *Strategies for achieving parity of esteem in European upper secondary education: Final report* (pp. 35–46). Institute for Educational Research Jyväskylä.
- Zenner, L., Kumar, K., & Pilz, M. (2017). Entrepreneurship education at Indian Industrial Training Institutes: A case study of the prescribed, adopted and enacted curriculum in and around Bangalore. *International Journal for Research in Vocational Education and Training*, 4(1), 69–94. https://doi.org/10.13152/IJRVET.4.1.4

Chapter 10 The Quality and Status of School-Based **Norwegian VET**



Hilde Hiim

Abstract The status and quality of vocational education and training (VET) represent a challenge in many countries, including Norway. The political goal in Norway in recent decades has been to ensure that vocational programmes at upper secondary level achieve equal status with academic programmes. Considerable efforts have been made to enhance the quality of vocational programmes to achieve this. A further goal has been to equate the scope and status of VET teacher education with teacher education in other fields, the rationale being that quality in VET teacher education is closely linked to quality in VET. This chapter presents an analysis of challenges in school-based Norwegian VET related to reforms implemented in recent decades. The analysis is particularly directed at issues of vocational relevance and coherence between educational content and the qualification needs of the vocations. The aim is to identify obstacles to relevance and coherence and to discuss the attempts that were made to enhance both status and quality. The results indicate that one key principle for improving the status and quality of VET is equal opportunities for vocational and academic students in terms of scope and level. Another key principle is a holistic organisation of VET where learning and work experience, knowledge, skills, theory and practice are integrated.

Keywords VET model · Vocational relevance · Collaboration VET schools – Companies · VET curricula · Holistic vocational competence

Introduction

In Norway, about 49% of youth cohorts choose to pursue vocational education and training (VET) programmes at upper secondary level (Norwegian Directorate for Education and Training, 2021a). This figure is high compared with, for example, Denmark, where the corresponding figure is 24% (Statistics Denmark, 2020). However, about 26% of students in Norwegian VET programmes drop out before completing their formal education, while about 20% choose to transfer to academic programmes (Norwegian Directorate for Education and Training, 2020). There are strong political ambitions to improve the quality and completion rate of VET programmes and to increase the number of students that qualify as skilled workers. Another political aim is to enhance the status of VET programmes (Ministry of Education and Research, 2017).

The purpose of this article is to present an analysis and discussion of the quality and status of Norwegian VET, based on steering documents and research. The idea is that other countries may learn from experiences gained from the Norwegian VET model. A core argument is that the major challenges regarding quality in schoolbased Norwegian VET concern vocational relevance and coherence. A vocationally relevant education can be defined as one characterised by close coherence between the educational content and the basic tasks and competence needs of the actual vocation (Hiim, 2017). Lack of vocational relevance in the school-based part of Norwegian VET has led to distrust and discontent among potential employers as well as students (Blichfeldt, 1996; Bødtker-Lund et al., 2017). The analysis shows that reforms of Norwegian VET in recent decades have aimed to strengthen both relevance and status. It is argued that there is a close connection between the two and that status relates to quality and respect. Equal status between vocational and academic programmes is also related to coherence between education levels. For instance, including more practical subjects at lower secondary level can strengthen students' knowledge of practical work and make it easier to choose vocational education. Opportunities for transitioning between vocational and academic programmes and for proceeding to further education at university level from all programmes are also important for achieving equal status. However, questions can be asked about whether attempts to achieve equal status between vocational and academic programmes focus too heavily on traditional academic premises of education.

In the following, a conceptual framework for the analysis is introduced in which the concepts of vocational relevance and coherence are related to a holistic concept of vocational competence. The background and main features of the Norwegian VET model are then presented, as well as some important aspects of vocational teacher education, based on analyses of formal policy documents. Findings from research on Norwegian VET are presented which indicate that the lack of vocational relevance and coherence poses a fundamental challenge. The findings that apply to the Norwegian model are compared with those from international research.

The discussion in the final section of the article focuses on what can be learned from experiences with the Norwegian model and how the quality and status of VET can be enhanced.

Vocational Relevance and Coherence in Light of a Holistic Concept of Competence

In recent decades, problems of relevance in vocational education have come into focus. It has been argued that the vocational education provided does not adequately prepare students for their future vocations. The lack of relevance can lead to a distrust of education and of newly educated students' competence. This problem has been ascribed to a lack of understanding of how vocational competence is constituted and developed (Billett, 2011; Dreyfus & Dreyfus, 1986; Rauner, 2007; Schön, 1983; Young, 2004).

In response to this challenge, a holistic understanding of vocational competence has gradually gained more influence but is by no means obvious. In an article discussing an extensive study of professional and vocational education, competence is defined as 'an integrated set of knowledge, skills and attitudes' (Koenen et al., 2015). However, this and other articles emphasise that use of the concept of competence varies widely and is often unclear (Lester & Religa, 2017). Still, most definitions emphasise that knowledge, skills and attitudes constitute a whole with regard to solving problems and tasks. Some also mention that competence must be demonstrated.

According to Koenen et al. (2015), competence-based, holistic vocational education is a form of education, the main principles of which include the solving of authentic vocational tasks and problems, the integration of subjects, and the relating of theory to tasks. Several interesting attempts have also been made to develop theories about how discipline-based theoretical knowledge can be contextualised in relation to practical performance (Heusdens et al., 2016; Young, 2004). A key issue is that the meaning of the theory in relation to practical performance must be made explicit. Rendering the vocational meaning of theory explicit, and developing vocational theoretical concepts aimed at explaining, problematising and developing vocational practice, are important issues of relevance in vocational education and vocational teacher education alike.

Several researchers and scholars of epistemology have argued that structuring vocational education around authentic vocational tasks and experiences is fundamentally different from structuring it around traditional scientific subjects; it builds on a different understanding of knowledge and competence (Billett, 2011; Hiim & Hippe, 2001; Rauner, 2007). This also resonates with John Dewey's arguments in *Democracy and Education* (1916).

According to Dreyfus and Dreyfus (1986) and to Schön (1983), a major concern regarding the issue of relevance in vocational education is the traditional split

between theory and practice that is expressed through a sharp division between theoretical and practical learning arenas and subjects. They argue that there is a need to develop new epistemology and emphasise the multi-dimensional and holistic character of vocational competence (Dreyfus & Dreyfus, 1986; Schön, 1983). Despite differences in their epistemologies, they both argue for the importance of authentic vocational tasks and challenges as the basis of relevant education.

Interpretations of pragmatist epistemology, such as epistemological perspectives in Heidegger's (1978) and Wittgenstein's (2003) early and late philosophies, have played a role in the development of a holistic concept of vocational competence. From a pragmatist perspective, vocational skills and understanding constitute a whole that is expressed through professional judgement in authentic situations (Dreyfus & Dreyfus, 1986; Hiim, 2010, 2017; Janik, 1996; Molander, 1997; Schön, 1983). For students to develop vocational competence, theoretical understanding must be based on practical experience of vocational tasks, and theoretical and practical subjects and learning arenas must be integrated. A holistic concept of vocational competence implies a holistic vocational education (Hiim, 2017).

The concept of coherence, which is used by many education researchers, can also illuminate issues of relevance to vocational education (Canrinus et al., 2015). Heggen et al. (2015) describe three types of coherence: biographical coherence refers to coherence between the education and the life and prior experience of the student; programme coherence refers to coherence between learning arenas and between subjects in a programme; and transitional coherence refers to coherence between the educational content and tasks in actual vocational workplaces. These concepts can be used to analyse coherence between, for instance, educational content at lower secondary level and the first year of VET at upper secondary level; between learning in the classroom, the school workshop and in practice periods in companies; between academic and vocational subjects; and between the school-based part and the apprenticeship part of VET. From a holistic perspective of vocational competence and education, coherence along all these dimensions will contribute to vocationally relevant education.

Issues of relevance and coherence in Norwegian VET, and of status, will be investigated in the following sections.

The Norwegian VET Model

Relevance and coherence have been emphasised in VET policy documents over the past couple of decades, and have been associated with quality and status (St.meld. nr. 30 (2003–2004); NOU 2008: 18; Meld. St. 20 (2012–2013); Meld. St. 28 (2015–2016)). The question is what these concepts mean more specifically in the organisation and implementation of VET.

An important value in the Norwegian educational system, as set out in the Education Act, is the equal right for all children to education from primary school level to upper secondary school level, regardless of place of residence or

socioeconomic background (Ministry of Education and Research, 1998). This value served as the foundation of the national educational reforms of 1974 and 1994 in which the right to 3 years of upper secondary education and formal qualification for a vocation or for higher education were granted to all Norwegian students. Under these reforms, schools were established that offered both academic and vocational programmes. The purpose was to enhance the prestige of vocational education and to encourage more students to choose and complete vocational programmes.

In the 1994 reform, known as Reform 94, all vocational programmes were structured in a 2 + 2 model consisting of 2 years of school followed by 2 years of apprenticeship in a relevant company or workplace (NOU 1991: 4; St.meld. nr. 33 (1991–1992). VET education was organised into 13 programmes, each leading to different but presumably related vocations. The first year in each programme provided general studies within a vocational area, while the second year provided more opportunities for vocational specialisation. The reform meant that many types of vocational education programmes which previously had differed in length as well as in organisation were now incorporated into a common structure. Many vocational training programmes which previously were not included in the apprenticeship system were now given formal status as education programmes for skilled workers.

Formal rights to education at upper secondary level were granted to everyone under the reform. Reform 94 was based on the good intentions of educational equality and an improved perception of VET, but it also created considerable challenges. Research showed that the main objection from companies, students and vocational teachers alike was that the education was too theory-based and failed to meet the competence needs of vocations and workplaces (Blichfeldt, 1996; Støren et al., 1998). The research illustrates a dilemma in Norwegian VET. The aim of the reform was to achieve equal access to education for all, but as a result the education became more standardised and generalised. Standardised, broad-based VET programmes tended to become less vocationally relevant and less respected in the labour market.

Some of these problems were addressed in a new and comprehensive reform, Knowledge Promotion 2006, which still largely regulates Norwegian VET. However, some changes were made in the revised Knowledge Promotion 2020. Both these reforms are presented and analysed below.

The 2+2 structure from 1994 was retained in 2006 and 2020. One important argument in favour of the 2+2 model is that broad-based vocational programmes give students throughout the country opportunities to undertake upper secondary education without having to move away from home. Another is that students who are uncertain of their vocational career choice have time at school before having to decide.

However, in 2006 the number of vocational programmes was reduced from 13 to eight, and included programmes such as electricity and electronics, building and construction, healthcare, childhood and youth development, design, arts and crafts, technical and industrial production, and restaurant and food processing (Norwegian Directorate for Education and Training, 2006). The first year in each programme led to a broad range of vocations within the respective fields. The second year led to a

narrower but still comprehensive range of vocations. In 2020, the number of programmes was increased to 10, and better opportunities for specialisation in the second year were provided. The reason for this was to make the education less general and more relevant to students' chosen vocations (Meld. St. 20 2015–2016; Norwegian Directorate for Education and Training, 2018).

Both the first and the second years contain three types of subjects: academic subjects, such as languages, mathematics, and social subjects; vocational subjects directly related to the actual vocations; and vocational specialisation, where students can specialise in a specific vocation, preferably through placement periods in a company. The formal curricula for the academic subjects in vocational and academic programmes are the same and are therefore called 'common core subjects'. One purpose has been to strengthen vocational students' academic knowledge and to provide students with opportunities to transition to academic programmes should they wish to do so. The intention has also been to provide more and equal opportunities for higher education and to increase the status of VET programmes (St.meld. nr. 30 (2003–2004)). However, in 2020 the curricula for the academic subjects were more explicitly related to the respective vocational programmes, e.g., electricity and electronics, restaurant and food processing, etc. The purpose was to make the subjects more relevant to the respective vocations (Norwegian Directorate for Education and Training, 2020).

As a basis for the formal curricula in vocational subjects in the Knowledge Promotion reforms in 2006 and 2020, the tasks and competence needs for the vocations in each programme were analysed and described. This meant that the curricula in vocational subjects were largely structured around subjects and learning outcomes concerning general work functions and tasks that were considered common to the respective vocations in the respective programmes. Under Reform 94 the curricula were more heavily structured around theoretical subjects and learning outcomes (Hiim, 2013). One intention in the Knowledge Promotion reforms has been to make the curricula more practical, holistic, and vocationally relevant (Norwegian Directorate for Education and Training, 2006, 2020). However, the large number of vocations still included in each programme meant that the learning outcomes had to be defined in highly generalised terms. For instance, the curriculum for the Technology and Industry programme (first year) is divided into the following three main areas or subjects: (1) production and services, (2) construction and control technology, and (3) productivity and quality management. The curricula for other programmes have similar main areas. The following example of a formulation of a learning outcome from the Design and Crafts programme is typical: 'The student shall have competence in planning and documenting a design and product development process alone and in collaboration with others within given time frames' (Norwegian Directorate for Education and Training, 2020). The idea seems to be that it should be possible for vocational teachers and students to interpret and specify the learning outcomes in relation to the individual vocations included in the programme, which in this instance would include tailoring,

blacksmithing, boatbuilding, sailmaking and watchmaking among others. The general work-based description of the learning outcomes makes it possible to organise teaching and learning based on practical tasks that can be related to theory (Hiim, 2013). The curricula specifically state practice-based learning, the integration of subjects, and coherence between theory and practice as the main principles (Norwegian Directorate for Education and Training, 2006, 2020).

Vocational specialisation was introduced in the Knowledge Promotion reform in 2006 and was retained in 2020. No requirement was set in the school-based part of VET in the curricula from 1994 for workplace training. A key intention for vocational specialisation is to give students opportunities to specialise in a vocation that interests them, preferably through workplace practical training (Norwegian Directorate for Education and Training, 2007, 2021b).

There are also formal curricula for each vocation in the apprenticeship part of VET, intended to ensure that apprentices obtain relevant practical and theoretical competence as skilled workers. As already mentioned, the curricula are based on analyses of tasks and competence demands for each vocation. Coherence between the content in the school-based and the apprenticeship parts of VET is an explicit principle in the formal curricula (Norwegian Directorate for Education and Training, 2006, 2020). The companies that take on apprentices are formally committed to ensuring that the learning outcomes in the actual curriculum are covered. To meet this commitment, it is common for companies to collaborate on organising a training office that helps facilitate the apprentice learning process. The apprenticeship ends with a formal examination, which usually consists of planning, carrying out and explaining orally and in writing a relatively extensive, authentic vocational task.

It can be concluded that the key intentions for Knowledge Promotion 2006 were to respond to challenges in Reform 94 and to enhance the quality and status of VET by emphasising vocational relevance in the formal curricula. This work was continued in 2020. More extensive and closer cooperation between vocational schools and companies and stronger vocational relevance in both vocational and common core academic subjects are key principles in the revised Knowledge Promotion 2020 (Ministry of Education and Research, 2017; Meld. St. 28 (2015–2016)). The question is to what extent principles concerning vocational relevance in 2020, which were also emphasised in 2006, will be implemented.

A major concern in Norwegian education policy now is the right for everyone to complete education at upper secondary level without any time or age restrictions. A political goal in what is called the Completion Reform is for most of the population to have formal competence as skilled workers or to undertake academic or professional studies at university level. The purpose is to strengthen productivity in business and industry as well as in society at large, and to create opportunities for individuals to live a good life (Meld. St. 21 (2020–2021)).

Before discussing research on the Knowledge Promotion reforms, I will first present some key aspects of Norwegian VET teacher education that are necessary to understand the quality of Norwegian VET.

VET Teacher Education in Norway

Most vocational teachers in Norway hold a trade certificate in their particular specialisation, such as plumbing, electrical installation or floristry, plus at least 2 years of practical experience and 2 years of higher vocational education at level 5 in the ISCED classification system (below university level) (UNESCO, 2012). In addition, they must have 1 year of vocational practical pedagogical education at level 6 (university level). However, many vocational teachers, especially in programmes and vocations that do not have an apprenticeship tradition, such as sales, service, tourism, healthcare, and childhood and youth development, have a university education at bachelor level (6) in, for instance, nursing or economics. In addition, they must have 1 year (60 ECTS) of vocational practical pedagogical education (6) (Grande et al., 2014).

Analyses of policy documents indicate that the aim in Norway is to equate vocational teacher education with teacher education in other fields in terms of scope and status (Norwegian Directorate for Education and Training, 2017). One of the main measures has been to establish a vocational teacher education programme for skilled workers at bachelor level, aimed at increasing the number, as well as enhancing the competence, of teachers with vocational backgrounds. Possibilities for developing and elevating existing higher vocational education from level 5 to university level are also discussed. One intention is to strengthen the competence as well as the status of skilled workers and vocational teachers, and to avoid parents and students viewing vocational education as a 'dead end' when it comes to opportunities in higher education (Meld. St. 9 (2016–2017)).

The first vocational teacher education programmes at bachelor level were established in 2003. One idea has been that teachers with vocational backgrounds can themselves contribute to strengthening vocational relevance and status in the school-based part of the programmes. The content in vocational teacher education includes one component (60 ECTS) of specialisation in the student teacher's own vocation. A second component (60 ECTS) includes the breadth of vocations in the programme and is specifically focused on teaching in the first year of VET. The third component (60 ECTS) includes vocational pedagogy and didactics and corresponds to vocational practical pedagogical education (Ministry of Education and Research, 2013, 2015b).

Teachers with vocational teacher education are formally qualified for teaching certain subjects at lower secondary school level (Ministry of Education and Research, 2013). This is one measure to strengthen practical knowledge in lower secondary school and the connection to vocational programmes at upper secondary level.

Vocational teachers with different types of teacher education have access to a research-based master's programme in vocational pedagogy. On completing their degree, students are eligible to undertake a PhD programme in education sciences at Oslo Metropolitan University, where vocational pedagogy and vocational didactics are elective components. The main aims for these programmes have been

to raise vocational teachers' competence, stimulate research related to vocational education, and to give vocational teachers the same opportunities as other teachers to undertake research training.

Enhancing the quality and status of VET teacher education and encouraging skilled workers to pursue teacher education are considered important policy measures for improving the quality and relevance of VET in Norway (Ministry of Education and Research, 2017). Research on Norwegian VET teacher education is sparse, but some of the research on VET mentioned below deals with the qualifications of VET teachers.

Research on the Current Norwegian VET Model

Policy documents and national curricula for VET in the Knowledge Promotion reforms of 2006 and 2020 are characterised by the aims to achieve vocational relevance and equal status with academic programmes. However, research on the Norwegian VET model identifies challenges in both aspects. It should be noted that existing research was carried out before Knowledge Promotion 2020, which is now gradually being implemented.

Extensive quantitative studies conducted by the Nordic Institute for Studies in Innovation, Research and Education (NIFU) in 2012 concluded that the dropout rate in Norwegian VET programmes was about the same as it had been before the Knowledge Promotion reform, that is, approximately 30%, and that approximately 20% chose to transfer to academic programmes. The dropout rate for academic programmes was approximately 25%. Many students drop out of VET because they fail to secure an apprenticeship (Vibe et al., 2012). In general, these figures have remained stable, though with a slight increase in the number of students transferring to academic programmes. However, more recent figures show that 60% of students starting VET completed after 5 years and 20% dropped out. Twenty per cent transferred to academic programmes, but many of these students did not complete their education (Mogstad & Nyen, 2016; Norwegian Directorate for Education and Training, 2019). Statistics show that the dropout rate in VET has fallen slightly in recent years but is still regarded as a social problem. The results from quantitative studies and statistics indicate that the Knowledge Promotion reform of 2006 has had little effect on the dropout and academic transition rates, although more recent statistics are more encouraging. The studies do not explain whether the reason is that the reform has not been sufficiently implemented downwards in the system or that the measures taken to increase relevance and status have not worked effectively.

Combined quantitative and qualitative studies conducted by the Norwegian Institute for Applied International Studies (Fafo) concern the implementation of vocational specialisation and opportunities for students to find placements during the school-based part of VET (Nyen & Tønder, 2012). The findings show that relatively few students have access to placement periods in companies during their

first year, which is contrary to the intention behind the curricula. Specialisation in a chosen vocation primarily takes place through school assignments or in the school workshop. Opportunities for work experience through placement periods are more common during the second year of the programmes. However, researchers emphasise that a lack of coherence between school content and practical work experience is a problem: 'An essential challenge in VET is to ensure that students experience coherence between what they learn at school and what they learn through practice periods in companies' (Nyen & Tønder, 2012, 9). The transition to apprenticeships is perceived to be difficult, and apprentices feel that they 'must learn everything over again' (Nyen & Tønder, 2012, 9). The study concludes that working life practice strengthens students' motivation and perceived relevance, but that many students lack opportunities to gain work experience in their chosen vocation. Part of the problem is that responsibility for contact between schools and companies is largely left to the individual vocational teachers, who receive little support from their leaders and local school authorities. These findings have been supported by a number of subsequent studies (Bødtker-Lund et al., 2017; Hiim, 2013; Aspøy & Tønder, 2017).

Several studies also indicate that interpretation of the national curricula for vocational subjects varies widely between programmes and between schools (Bødtker-Lund et al., 2017; Hiim, 2013; Olsen & Reegård, 2013; Nore & Lahn, 2011). Three types of interpretation stand out. At some schools and in some programmes the vocational subjects are organised as compulsory introductory modules in the most common vocations. This means that students in, for instance, the building and construction programme must learn a little about brickwork, carpentry, painting, plumbing, etc. The research findings show that many students find this quite meaningless. They want to concentrate on one or perhaps two vocations in which they are interested. Some students, such as one who had wanted to become a plumber since lower secondary school, received no real opportunity to learn about this vocation before he became an apprentice (Hiim, 2013).

In some programmes and schools, the vocational subjects are largely organised around theoretical assignments and content. The theoretical content may have vague and varying relevance to the actual vocations. One example is where students in the Service and Transport programme who wanted to become truck drivers had to learn a lot about economics. Another example is where students in the Healthcare, Childhood and Youth Development programme who wanted to become youth workers had to learn about physiology and diseases. There are many similar examples. The research shows that students find it quite meaningless to study theoretical content with vague or no relevance to their chosen vocation (Bødtker-Lund et al., 2017; Hiim, 2013).

One main reason why interpretation of the curricula varies so widely is that the curricula are formulated in very general terms. The breadth of the vocational programmes also creates challenges when it comes to adapting the content to students' individual career choices and interests.

There are also examples of teachers differentiating the content of vocational subjects according to individual students' vocational interests. The teachers organise the content around the students' plans for specialisation and relate it to practical work experience (Hiim, 2013). I will come back to these examples below.

Results from several studies indicate that teachers' own vocational and pedagogical backgrounds influence their interpretation of the national curricula and their teaching of vocational subjects (Bødtker-Lund et al., 2017; Hansen & Haaland, 2015; Hiim, 2013; Aakernes, 2018). Teachers with professional university backgrounds, such as engineers, nurses or economists, tend to prioritise theoretical content. By contrast, teachers with education and backgrounds in a skilled trade prioritise practical tasks. However, some are inclined to favour their own vocations at the expense of others in the programme. The lack of knowledge about the breadth of vocations in programmes and of contact with corresponding companies poses considerable challenges. Results from one study show that many vocational teachers want continuing education based on job training in their own vocation and in vocations included in the programme (Tønder & Aspøy, 2017).

When it comes to the academic subjects, some studies indicate that many vocational students do not find the content meaningful (Bødtker-Lund et al., 2017; Hiim, 2013, 2014). Students express the need for competence in, for instance, mathematics or languages in their future career, but say that these needs are not met at school (Hiim, 2013). The education authorities have initiated and supported an extensive national development project aimed at orienting academic subjects towards vocational programmes, but no research-based evaluation of the project has been carried out (Norwegian Directorate for Education and Training, 2014–2016). Since 2010, the principle of relating academic subjects to specific vocational education programmes is stated in the Regulations relating to the Education Act, sections 1–3 (Ministry of Education and Research, 2006; see also Meld. St. 28 (2015–2016)). In the new curricula for academic subjects in vocational programmes, academic subjects such as Norwegian and mathematics are explicitly related to different vocational areas (Norwegian Directorate for Education and Training, 2020).

As mentioned, one of the main reasons for increasing the number of VET programmes in Knowledge Promotion 2020 was to strengthen vocational relevance and opportunities for specialisation. But the scope of vocations in most programmes is still broad, and the formal curricula very general. The various interpretations mentioned above may remain, even if general signals of specialisation, vocational relevance and coherence are more explicitly expressed.

Overall, research on Knowledge Promotion 2006 suggests that principles of relevance and coherence in the policy documents and the formal curricula were implemented to a limited extent only. There are considerable challenges related to collaboration between vocational schools and companies, opportunities for specialisation, and to relating academic as well as vocational subjects to specific vocations. These challenges are reflected in the discontent expressed by students and employers (Bødtker-Lund et al., 2017; Hiim, 2013, 2014).

A Study on Increasing Relevance in Norwegian VET

A study was carried out at Oslo Metropolitan University from 2007 to 2011 based on experiments aimed at strengthening relevance in Norwegian VET within the existing model. The findings from the study correspond with those from other studies regarding challenges in Norwegian VET. However, the results also show how vocational relevance in the school-based part of VET can be strengthened (Hiim, 2013, 2015). The experiments were conducted in close cooperation with a group of 30 vocational teachers participating in an in-service master's programme in vocational pedagogy.

In collaboration with their colleagues and school leaders, the teachers organised opportunities for practice placements in a chosen vocation for their first- and second-year students. Professional and social preparation of the practice was emphasised, along with contact between teachers and instructors in the actual companies before, during and after the practice periods. Before starting their practice period, the students were divided into groups based on their chosen vocational specialisation and worked on assignments and tasks related to their respective vocations. After the practice period, the teachers organised individual and collective reflection on the practice experience. The teachers also tried to actively use students' experiences from practice in their teaching. The results show quite unambiguously how motivating and meaningful this kind of practice is to most students. Typical statements are: 'It's been very stimulating'; 'I think it is meaningful to learn about the vocation in practice'; and 'I could not have been more pleased' (Hiim, 2013, 326). The students also emphasised that work-life practice is necessary for making an informed choice: 'The experience from work practice has helped me become more certain of my choice of occupation and education' (Hiim, 2013, 249).

In many of the teachers' experiments, all the vocational subjects were integrated with and organised around the students' practice experiences. The students' reactions were unanimously positive, such as: 'The work I do in the company and the work I do at school are somehow connected. That's what makes me learn' (Hiim, 2013, 336).

In the experiments conducted at Oslo Metropolitan University, the academic teachers were responsible for relating academic subjects to tasks in the respective vocations. For example, lessons in mathematics were used to perform important calculations in the workplace or in the school workshop. Such tasks could involve calculating the quantity and price of food for a dinner or the right dimensions for materials needed to build a roof. Lessons in English were used to read manuals that students needed for their work. In Norwegian lessons, students wrote authentic work reports, etc. Again, the results were positive: 'When the subjects are directed towards something that's interesting, that is, the vocation, it's ok. When they are directed towards the vocation, and I see that, it's motivating' (Hiim, 2013, 307). One challenge was that many academic teachers knew little about vocational programmes and were reluctant to collaborate with vocational teachers. Analyses of the curricula for the education of academic teachers at different levels show that vocational

education is barely mentioned (Hiim, 2013; Ministry of Education and Research, 2010, 2015a).

The experiments also revealed many challenges, some of which are mentioned in other studies. Some companies, particularly those in vocational areas without apprenticeship traditions, were reluctant to receive students. Sometimes the companies were unable to arrange sufficiently relevant work tasks and learning opportunities for the students. School timetables could make it difficult to arrange workplace practice and to integrate subjects around practice (Hiim, 2013). The vocational teachers who participated in the project managed to overcome many of these challenges. The results show that vocational students find their education vocationally relevant and meaningful when the content is systematically organised around authentic vocational tasks and work experience. The companies and instructors who participated in the experiments were positive towards collaborating with the schools when this was well planned and when the schools followed up on the collaboration. Like several other studies, this study indicates that work-life practice strengthens students' apprenticeship opportunities (Hiim, 2013).

Based on the experiences and results from the above study, a similar study was initiated in 2016–2019. Preliminary results indicate that structures for systematic collaboration between schools and companies can contribute strongly to a more vocationally relevant curriculum (Hiim & Tønder, 2018). Results from both studies indicate that it is possible to implement the principles of vocational relevance and coherence in the Knowledge Promotion reforms to a considerable extent, despite the challenges, and that it makes the education more meaningful to students as well as to teachers and instructors in companies.

International research on VET, which is discussed in the next section, shows that issues concerning vocational relevance and coherence are important in VET systems in many countries.

International Research on VET

International research on VET shows that vocational relevance in the school-based part and coherence between educational content at school and professional tasks are important issues across models.

For instance, Gessler (2017) refers to an extensive quantitative study of the German dual system, showing that collaboration between schools and companies is almost non-existent. His conclusion is that German VET is more of a parallel system than a dual system. The results indicate that there is a lack of coherence between what students learn at school and what they learn in the workplace. Gessler (2017) also points to similar challenges in Swiss VET.

Young (2004) addressed problems of coherence caused by poor cooperation between learning at school and in companies in English VET. According to Young, there is a tendency for the teachers to prioritise theoretical scientific subjects, while the companies want their workers to have competence in performing specific,

sometimes basic, instrumental tasks. Young argues that lack of theoretical understanding of the work may obstruct professional development and eventually lead to stagnation. To address the problem, theoretical scientific subjects must be re-contextualised in relation to vocational performance.

Louw (2017) and Walgreen and Aarkrog (2012) studied the transfer of knowledge between learning arenas in Danish VET. Both emphasise the importance of continuous cooperation between schools and companies aimed at creating conditions for coherence and the transfer of knowledge between the school and the workplace.

Much international research is concerned with developing approaches in VET that are based on a multi-dimensional and holistic concept of vocational competence, where coherence between learning arenas and between practice and theory are key principles. Research and development projects in different countries aim to create such approaches. Concepts such as innovation pedagogy, design pedagogy and hybrid learning concern the development of education models and content that cross the boundary between school and working life (Cremers et al., 2016; Kairisto-Mertanen et al., 2012; Zitter et al., 2016). Proximity to the vocational tasks and educational content that is clearly related to vocational performance are essential in these approaches (Aakernes & Hiim, 2019).

However, even if a more holistic understanding of vocational competence and education is emerging, epistemological traditions of drawing a distinction between theory and practice remain strong. In the following sections, I will discuss vocational relevance, coherence and status in school-based Norwegian VET based on a holistic concept of competence.

Discussion: Strengthening Vocational Relevance, Coherence and Status in School-Based Norwegian VET

As mentioned above, a major political issue in school-based Norwegian VET has been to enhance quality and thus also status by making education more vocationally relevant, holistic, competence-based and coherent. A holistic understanding of vocational competence means that knowledge, skills, and attitudes are integrated. The solving of authentic vocational tasks and problems, the integration of subjects and the relating of theory to tasks are key principles in competence-based, holistic VET (Billett, 2011; Dreyfus & Dreyfus, 1986; Koenen et al., 2015; Schön, 1983). Coherence between learning arenas and between different levels within the education system is important (Heggen et al., 2015).

This final section discusses opportunities for and obstacles to the relevance, coherence, and status of Norwegian VET. I will look briefly at possible reasons why so many students choose VET programmes and why students transfer to academic programmes or drop out. Thereafter, I will discuss contradictions concerning relevance and coherence in the curriculum in VET reforms, followed by a discussion of important conditions for strengthening relevance and coherence. Essential issues

are the role of practice placements in the school-based part of VET, and the importance of specialisation and of relating vocational as well as academic subjects to work-life experience. I will also discuss vocational teachers' competence in collaborating with companies, and how access to education at university level from vocational programmes and from vocational teacher education programmes can strengthen relevance and status in VET.

I will summarise the key principles for improving the quality and status of VET in the conclusion.

Possible Reasons for Choosing, Not Choosing, or Leaving VET

The reason why as much as half of Norwegian youth cohorts choose VET programmes may relate to the right to a minimum of 3–4 years of formal education in all programmes, schools offering both academic and vocational programmes, flexible opportunities for transferring between programmes, and opportunities for further education at university level. However, more research is needed to investigate these suppositions.

Extensive qualitative studies indicate that many VET students are disappointed because they find the education too general and too theoretical and lose sight of the vocations they are interested in (Bødtker-Lund et al., 2017; Hiim, 2013; Nyen & Tønder, 2012). There are strong indications that too wide a gap between school and work and between practical and theoretical learning arenas and subjects create discontent and loss of motivation. However, it is important to emphasise that decisions to drop out have many complex explanations that are not discussed in this article, such as mental health or social issues.

Although the number of students choosing VET programmes at upper secondary level is high, the political goal is to increase it because, like many other countries, Norway has a great need for skilled workers (Billett et al., 2020). However, lack of coherence between lower secondary education and VET programmes at upper secondary level is a problem. The national curriculum for lower secondary education consists mainly of theoretical subjects, even though a few hours of practical subjects have been included (Norwegian Directorate for Education and Training, 2015a, b). The curriculum provides few opportunities for students to be acquainted with skilled practical work and vocational education (Norwegian Directorate for Education and Training, 2006). Moreover, the curricula for the education of lower secondary school teachers and teachers of general subjects contain nothing specific about vocational education as part of the education system (Ministry of Education and Research, 2010, 2015a).

It can be concluded that theoretical, academic knowledge is prioritised in the lower parts of the education system and in general teacher education at the expense of other dimensions of knowledge and competence. Students at lower secondary level must perceive that practical vocational competence is valued if they are to be stimulated to choose VET programmes.

Contradictions in the Curriculum in VET Reforms

As mentioned, the 2 + 2 model that was introduced in Reform 94 led to a high degree of standardisation, which in turn led to generalisation and theorisation of the curriculum in the school-based part of VET. The structure and the curriculum were to a large extent characterised by what Schön (1983) describes as a technical understanding of knowledge and competence.

The Knowledge Promotion reforms of 2006 and 2020 seem to be more inspired by a holistic concept of competence, but there are several contradictions in the reform documents and in the curricula. The 2 + 2 structure of VET was retained, but the curricula were changed. The curricula in vocational subjects are largely structured around general vocational tasks or functions, but the functions are divided into separate subjects. However, in 2020, the number of vocational subjects was reduced from three to two in several programmes, making the integration of subjects simpler. Many vocational teachers argue that there should be just one extensive, integrated vocational subject (Hiim, 2013).

General ideas of vocational relevance and coherence are not always followed up, and the learning outcomes in curricula for vocational subjects in some programmes, such as Healthcare, Childhood and Youth Development, are described almost exclusively in theoretical terms (Norwegian Directorate for Education and Training, 2020). The curricula for the academic, common core subjects in 2006 were even more extensive and theoretical than in 1994 but were changed in 2020 and are now more closely related to the various VET programmes. Even though workplace practice is included in the vocational specialisation course, many students do not receive the opportunity of workplace practice in a company (Bødtker-Lund et al., 2017; Nyen & Tønder, 2012). The formal guidelines can be considered too weak in this respect, and the labour market is not sufficiently committed to providing students with practice.

The conclusion is that the curricula are contradictory. At a general level they emphasise a holistic view of competence, but at a more concrete level they are still partly characterised by the distinction between theory and practice (Hiim, 2013).

Work-Life Practice, Specialisation, and Relating Subjects to Vocational Tasks

Results from several studies on Norwegian VET show that collaboration between schools and companies during the two school-based years is limited in scope as well as in quality (Bødtker-Lund et al., 2017; Hiim, 2013; Nyen & Tønder, 2012). At the same time, the results indicate that practical experience is a prerequisite for understanding vocational and theoretical concepts and for developing holistic vocational competence (Hiim, 2013, 2015). The importance of authentic practical tasks to

which theoretical concepts can be related is also emphasised in the international research on VET (Koenen et al., 2015).

The conclusion is that to enhance the quality and status of VET, there is a need to develop permanent and formal collaborative structures between schools and companies. There is also a need to know more about *how* such structures can be developed, and about what specifically is meant by coherence between work practice and educational content in specific vocations and programmes.

As mentioned, studies also indicate that students do not find it meaningful to divide their time between multiple vocations in a broad-based programme or to spend it on general theory that is supposed to be relevant to multiple vocations (Bødtker-Lund et al., 2017; Hiim, 2013; Olsen & Reegård, 2013). The students state that having opportunities to develop competence in a specific vocation, based on authentic tasks that are systematically related to theoretical concepts, is the best way to learn. However, many students also expressed a need to try out several vocations before choosing their future career. This is an argument against forcing students to specialise too early and, possibly, in favour of retaining broad-based programmes in the first year (Hiim, 2013). Research-based experiments to increase the relevance of Norwegian VET showed that specialisation within broad-based programmes is possible and can be successful, but that it is quite demanding in terms of teacher competence and workload and of organising time schedules (Bødtker-Lund et al., 2017; Hiim, 2013).

Strengthening students' opportunities for specialisation is a key concern in the Knowledge Promotion 2020 reform (Meld. St. 28 2015–2016). It requires teachers to be able to differentiate the content in vocational subjects according to the students' chosen specialisations. Theoretical and practical content must be related to students' workplace experience in their chosen vocations.

As already mentioned, relating academic subjects to vocational education programmes has been a key principle in regulations governing curricula since 2010, and since 2020 specific curricula apply for academic subjects in VET programmes (Ministry of Education and Research, 2006; Norwegian Directorate for Education and Training, 2020). The curricula are based on general analyses of what types of knowledge and competence in, for instance, mathematics, English, Norwegian or social science, are relevant for specific vocational areas. However, Norwegian and international research indicate a need for development projects and research aimed at strengthening a holistic, practical and theoretical conceptual base for the respective vocations (Heusdens et al., 2016; Hiim, 2013, 2017; Young, 2004).

Several studies have shown that close cooperation between schools and companies on practice for students in both years strengthens students' opportunities for apprenticeships. Well-organised practice in the school-based part also makes the transition from school to apprenticeship more coherent for the students (Nyen & Tønder, 2012; Hiim, 2013; Olsen & Reegård, 2013). More than 80% of apprentices complete their education and obtain a journeyman's certificate (Norwegian Directorate for Education and Training, 2019). There are complex reasons for the 20-per-cent dropout rate, but we know that some students feel poorly prepared and

do not think they learned enough about their vocation at school (Nyen & Tønder, 2012; Hiim, 2013).

One conclusion is that the vocational teachers' competence in cooperating with companies and in relating school subjects to vocational tasks and practical experience is pivotal to the quality of vocational education. Studies indicate that there is a considerable need for continuing education for vocational teachers in this field, particularly for teachers with no background in a skilled trade (Bødtker-Lund et al., 2017; Hiim, 2013).

Access to Higher Education at University Level

One means of raising the status of VET has been to strengthen opportunities for direct access to education at university level (St.meld. nr. 44 (2008–2009); Meld. St. 9 (2016–2017)). However, there is a risk of changes being made in terms of academic rather than vocational education. For instance, it can be asked whether the wide range of general academic subjects in VET provides students with the most relevant qualifications for admission to vocational programmes at university level, such as nursing or engineering programmes. The purpose of aligning the general academic subjects with the vocations is to strengthen vocational students' competence in these subjects as well as their overall vocational competence (Meld. St. 21 2020-2021).

There is also a risk of prioritising general, discipline-based research over research related to the vocations when raising VET programmes from level 5 to level 6. An alternative would be to combine access to higher education with the development of programmes that are based on a more holistic concept of vocational competence, education and research where theoretical and practical components are highly integrated (Heusdens et al., 2016; Hiim, 2017; Koenen et al., 2015; Schön, 1983).

An important issue is to stimulate research and theory development in the vocations on the premises of vocational practice. Master and PhD programmes in vocational pedagogy contribute to this to some extent. Raising the level of conventional higher vocational education programmes to university level could be an important contribution if the programmes were oriented towards research in and on the vocations.

Conclusion: Key Principles for Improving the Quality and Status of VET

A major goal in Norwegian education policy has been equal rights to education for all. To achieve this, the structure and content of primary and lower secondary school education (10 years) are the same for all students. The reforms in vocational education at upper secondary level discussed above have aimed to make vocational

and academic programmes as equal as possible in terms of scope and level. Another aim has been to allow anyone wishing to study at university level to do so without detours. The fact that half of youth cohorts apply for vocational programmes indicates that the reforms have helped promote equal status between vocational and academic programmes. Based on the Norwegian experience, structures that contribute to equal educational opportunities is a key principle for improving the status of vocational education.

Research on Norwegian VET reforms shows a shift away from the distinction between school and working life as learning arenas, and between theoretical and practical knowledge, towards intentions and formal regulations for more holistic education. However, there are considerable contradictions in the current formal curricula between general principles of wholeness and coherence on the one hand and course content on the other. The extent to which intentions in the reforms have been implemented so far also varies. However, research shows that students' motivation, learning outcomes and security when it comes to career choices increase through systematic collaboration between schools and companies on coherence between vocational and educational content. Both vocational teachers and instructors in companies believe that this kind of coherence enhances the quality of VET (Bødtker-Lund et al., 2017; Hiim, 2013). It can be concluded that systematic and continuous collaboration between schools and companies on educational content and work life practice is a key principle for enhancing the quality of VET and thereby its status.

Although structures that provide equal educational opportunities for all have raised the status of Norwegian VET, there is still a way to go in enhancing its quality. The reforms in 2006 and 2020 have many good intentions. The future challenge is to improve vocational relevance, wholeness, and coherence on VET's own premises. This requires epistemological insight into the holistic character of vocational competence.

References

Aakernes, N. (2018). From school to work: Coherence between learning in school and learning in workplaces for apprentices in the Media graphics programme in Norway. Nordic Journal of Vocational Education and Training, 8(1), 76–97. https://doi.org/10.3384/njvet.2242-458X.188176

Aakernes, N., & Hiim, H. (2019). Yrkesrelevant utdanning for fremtidens mediegrafikere. Scandinavian Journal for Vocations in Development, 4(1), 81–108. https://doi.org/10.7577/ sjvd.302

Aspøy, T. M., & Tønder, A. H. (2017). Yrkesfaglæreres kompetanse. Fafo-rapport 2017.

Billett, S., Choy, S., & Hodge, S. (2020). Enhancing the standing of vocational education and the occupations it serves: Australia. *Journal of Vocational Education & Training*, 72(2), 270–296. https://doi.org/10.1080/13636820.2020.1751247

Billlett, S. (2011). Vocational education. Purposes, traditions and prospects. Springer.

Blichfeldt, J. F. (1996). Organisering og samarbeid: Motsetningsfylte prosesser. In *Utdanning for alle? Evaluering av Reform 94*. Tano Aschehoug.

- Bødtker-Lund, D., Hansen, K. H., Haaland, G., & Vagle, I. (2017). Endringsbehov i norsk yrke-sopplæring? Elevers, lærlingers og yrkesfaglæreres erfaringer med yrkesopplæring i Vg1. Scandinavian Journal of Vocations in Development, 2, 1–33. https://doi.org/10.7577/sjvd.2577
- Canrinus, E. T., Bergrem, O. K., Klette, K., & Hammerness, K. (2015). Coherent teacher education programmes: Taking a student perspective. *Journal of Curriculum Studies*, 49(3), 313–333. https://doi.org/10.1080/00220272.2015.1124145
- Cremers, P. H. M., Wals, A. E. J., Wesselink, R., & Mulder, M. (2016). Design principles for hybrid learning configurations at the interface between school and workplace. *Learning Environments Research*, 19, 309–334. https://doi.org/10.1007/s10984-016-9209-6
- Dewey, J. (1916). Democracy and education: An introduction to the philosophy of education. Macmillan.
- Dreyfus, H., & Dreyfus, S. (1986). *Mind over machine: The power of human intuition and expertise in the era of the computer.* Free Press.
- Gessler, M. (2017). The lack of collaboration between companies and schools in the German dual apprenticeship system: Historical background and recent data. *International Journal for Research in Vocational Education and Training*, 4(2), 164–195.
- Grande, S. Ø., Landro, J., Lyckander, R., & Rokkones, K. (2014). Fram i lyset! En kartlegging av status og behov for lærerutdanning for yrkesfag. Høgskolen i Oslo og Akershus.
- Hansen, K., & Haaland, G. (2015). Utfordringer i norsk yrkesopplæring. In K. Hansen, G. Løkensgard-Hoel, & G. Haaland (Eds.), Tett på yrkesopplæring (pp. 19–46). Fagbokforlaget.
- Heggen, K., Smeby, J. C., & Vågan, A. (2015). Coherence: A longitudinal approach. In J. C. Smedby & M. Suthpen (Eds.), *From vocational to professional education* (pp. 70–88). Routledge.
- Heidegger, M. (1978). Being and time. Blackwell.
- Heusdens, W. T., Bakker, A., Baartman, L. K. J., & De Bruijn, E. (2016). Contextualising vocational knowledge: A theoretical framework and illustrations from culinary education. *Vocations and Learning*, 9, 151–165. https://doi.org/10.1007/s12186-015-9145-0
- Hiim, H. (2010). Pedagogisk aksjonsforskning. Gyldendal Academic Press.
- Hiim, H. (2013). Praksisbasert yrkesutdanning. Gyldendal Academic Press.
- Hiim, H. (2014). Yrkesretting av fellesfag. In M. Postholm & T. Tiller (Eds.), Profesjonsrettet pedagogikk. Cappelen Damm Academic Press.
- Hiim, H. (2015). Kvalitet i yrkesutdanningen Resultater fra et aksjonsforskningsprosjekt om vrkesforankring av innholdet i yrkesutdanningen. *Norsk Pedagogisk Tidsskrift*, 2/3, 136–148.
- Hiim, H. (2017). Ensuring curriculum relevance in vocational education and training: Epistemological perspectives in a curriculum research project. *International Journal for Research in Vocational Education and Training*, 4(1), 1–19.
- Hiim, H., & Hippe, E. (2001). Å utdanne profesjonelle yrkesutøvere. Gyldendal Academic Press.
- Hiim, H., & Tønder, A. H. (2018). Hva sier forskningen om yrkesfaglæreres og instruktørers kompetanse og om behovet for samarbeid skoler/arbeidsliv? Paper presented at ARENA for Quality in VET. Utdanningsdirektoratet, Hamar, Norway, November 2018.
- Janik, A. (1996). Kunskapsbegreppet i praktisk filosofi. Symposion.
- Kairisto-Mertanen, L., Räsänen, M., Lehtonen, J., & Lappalainen, H. (2012). Innovation pedagogy: Learning through active multidisciplinary methods. Revista de Docencia Universitaria, 10(1), 67–86.
- Koenen, A. K., Dochy, F., & Berghmans, I. (2015). A phenomenographic analysis of the implementation of competence-based education in higher education. *Teaching and Teacher Education*, 50, 1–12. https://doi.org/10.1016/j.tate.2015.04.001
- Lester, S., & Religa, J. (2017). Competence' and occupational standards: Observations from six European countries. *Education and Training*, 59(2), 201–214. https://doi.org/10.1108/ ET-05-2016-0084
- Louw, A. (2017). Kobling mellem skole og praktik på erhvervsuddannelserne. In K. E. Andreassen & H. Duch (Eds.), Forandringer i ungdomsuddannelserne: Overgange og indsatser (pp. 93–114). Aalborg University Press.

- Meld. St. 20 (2012–2013). *På rett vei. Kvalitet og mangfold i fellesskolen*. Ministry of Education and Research (Kunnskapsdepartementet).
- Meld. St. 21 (2020–2021). Fullføringsreformen med åpne dører til verden og fremtiden. Ministry of Education and Research (Kunnskapsdepartementet).
- Meld. St. 28 (2015–2016). Fag-Fordypning-Forståelse. En fornyelse av Kunnskapsløftet. Ministry of Education and Research (Kunnskapsdepartementet).
- Meld. St. 9 (2016–2017). *Fagfolk for fremtiden. Fagskoleutdanning*. Ministry of Education and Research (Kunnskapsdepartementet).
- Ministry of Education and Research (Kunnskapsdepartementet). (1998). Opplæringslova, kapittel 1.
- Ministry of Education and Research (Kunnskapsdepartementet). (2006). Forskrift til opplæringslova, kapittel 1–3.
- Ministry of Education and Research (Kunnskapsdepartementet). (2010). Rammeplan for grunnskolelærerutdanning.
- Ministry of Education and Research (Kunnskapsdepartementet). (2013). Forskrift om rammeplan for yrkesfaglærerutdanning for trinn 8–13.
- Ministry of Education and Research (Kunnskapsdepartementet). (2015a). Rammeplan for praktisk-pedagogisk utdanning.
- Ministry of Education and Research (Kunnskapsdepartementet). (2015b). Rammeplan for praktisk-pedagogisk utdanning for yrkesfag.
- Ministry of Education and Research (Kunnskapsdepartementet). (2017). Yrkesfagløftet 2017.
- Mogstad, T. M., & Nyen, T. (2016). Bedre gjennomføring i videregående opplæring. Evaluering av kvalifiseringsmodeller i og etter Vg2 yrkesfag og i Vg3 påbygg. Fafo-rapport.
- Molander, B. (1997). Arbetets kunskapsteori. Gotab.
- Nore, H., & Lahn, L. C. (2011). Vi gjør så godt vi kan'. Lokale og faglige variasjoner i arbeid med innhold og vurdering i yrkesopplæringen på Vg2. In H. Høst (Ed.), *Kvalitet i fag- og yrkesopplæringen. Fokus på skoleopplæringen. Rapport* 2. NIFU, Fafo, Høgskolen i Oslo og Akershus, Universitetet i Bergen.
- Norwegian Directorate for Education and Training (Utdanningsdirektoratet). (2006). *Læreplaner i vrkesfaglige utdanningsprogram*.
- Norwegian Directorate for Education and Training (Utdanningsdirektoratet). (2007). Yrkesfaglig fordypning.
- Norwegian Directorate for Education and Training (Utdanningsdirektoratet). (2014–2016). FYR Fellesfag, yrkesretting og relevans. Sluttrapport fra Utdanningsdirektoratet.
- Norwegian Directorate for Education and Training (Utdanningsdirektoratet). (2015a). *Læreplan for arbeidslivsfag på ungdomstrinnet*.
- Norwegian Directorate for Education and Training (Utdanningsdirektoratet). (2015b). *Læreplan* for utdanningsvalg på ungdomstrinnet.
- Norwegian Directorate for Education and Training (Utdanningsdirektoratet). (2017). Yrkesfaglærerløftet 2017.
- Norwegian Directorate for Education and Training (Utdanningsdirektoratet). (2018). Ny til-budsstruktur for yrkesfaglige utdanningsprogram fra skoleåret 2020–21.
- Norwegian Directorate for Education and Training (Utdanningsdirektoratet). (2019). *Læreplaner* for fag i grunnskolen.
- Norwegian Directorate for Education and Training (Utdanningsdirektoratet). (2020). Læreplanverket, yrkesfaglige utdanningsprogram.
- Norwegian Directorate for Education and Training (Utdanningsdirektoratet). (2021a). Søkertall videregående opplæring for skoleåret 2019–2020 (analyse).
- Norwegian Directorate for Education and Training (Utdanningsdirektoratet). (2021b). Yrkesfaglig fordypning.
- NOU. (1991:4). *Veien videre til studie- og yrkeskompetanse for alle*. Ministry of Church affairs, Education and Research (Kirke- utdannings- og forskningsdepartementet).

- Nyen, T., & Tønder, A. H. (2012). Fleksibilitet eller faglighet? En studie av innføringen av faget prosjekt til fordypning i Kunnskapsløftet. Fafo-rapport.
- Olsen, O. J., & Reegård, K. (2013). Læringsmiljø og gjennomføring i lærer- og elevperspektiv i tre yrkesfaglige opplæringsløp. In H. Høst (Ed.), *Kvalitet i fag- og yrkesopplæringen. Fokus på skoleopplæringen*. NIFU, Fafo, HiOA/Universitetet i Bergen.
- Rauner, F. (2007). Practical knowledge and occupational competence. *European Journal of Vocational Training*, 40(1), 52–66.
- Schön, D. (1983). The reflective practitioner. Basic Books.
- St.meld. nr. 30 (2003–2004). Kultur for læring. Ministry of Education and Research (Utdanningsog forskningsdepartementet).
- St.meld. nr. 33 (1991–1992). Kunnskap og kyndighet. Om visse sider ved videregående opplæring. Ministry of Church Affairs, Education and Research (Kirke-, utdannings- og forskningsdepartementet).
- St.meld. nr. 44 (2008–2009). *Utdanningslinja*. Ministry of Education and Research (Kunnskapsdepartementet).
- Statistics Denmark (Danmarks Statistik). (2020). Erhvervsuddanneser i Danmark 2020.
- Støren, L. A., Skjersli, S., & Aamodt, P. O. (1998). *I mål? Evaluering av Reform 94: Sluttrapport fra NIFUs Hovedprosjekt*. NIFU-rapport;18-1998.
- Tønder, A. H., & Aspøy, T. M. (2017). Yrkesfaglærernes kompetanse. Fafo-rapport.
- UNESCO Institute for Statistics. (2012). International standard classification of education ICED 2011. UNESCO.
- Vibe, N., Frøseth, M. W., Hovdehaugen, E., & Markussen, E. (2012). Strukturer og konjunkturer: Evaluering av Kunnskapsløftet. Sluttrapport fra prosjektet Tilbudsstruktur, gjennomføring og kompetanseoppnåelse i videregående opplæring (NIFU-rapport 26/2012). NIFU.
- Wahlgren, B., & Aarkrog, V. (2012). *Transfer. Kompetence i en professionel sammenheng*. Aarhus University Press.
- Wittgenstein, L. (2003). Filosofiske undersøkelser. De Norske Bokklubbene.
- Young, M. (2004). Conceptualizing vocational knowledge: Some theoretical considerations. In H. Rainbird, A. Fuller, & A. Munro (Eds.), Workplace learning in context (pp. 186–200). Routledge.
- Zitter, I., Hoeve, A., & de Bruijn, E. (2016). A design perspective on the school-work boundary: A hybrid curriculum model. *Vocations and Learning*, 9(1), 111–131. https://doi.org/10.1007/s12186-016-9150-y

Chapter 11 Perspectives on Informing Post-School Pathways: A Vietnamese Case Study



Anh Hai Le

Abstract In Vietnam, while the importance of vocational education and training (VET) is increasingly recognised in national discourse and policies, its standing continues to be low compared to other educational pathways, such as higher education. There is often a mismatch between the material worth and benefits of VET and decision-making about it by young people and their parents. This decision-making has been shaped by historical influences in Vietnam about the standing of VET and the occupations it serves through the voices and sentiments of privileged others (e.g., government, schools, teachers and parents). Bringing about change in these sentiments requires transforming the views of those who engage with and subscribe to processes in decision-making. In advancing this case, the chapter commences with an overview of the Vietnamese government initiatives in VET embarking on modernisation and industrialisation reform to enhance the country's standing in the Association of Southeast Asian Nations (ASEAN) and seeking competitiveness in the process of international economic integration. It then reports on a case study seeking to understand factors shaping young people's decision-making about postschool pathways and how to redress the low standing of VET. The qualitative study engaged a cohort of schoolteachers, school-aged students and their parents through interviews and an online survey. The findings indicated differences between school students and parents' perspectives and suggestions about VET as a post-school pathway. These findings suggest that a reliance on the experiences and preferences of immediate family, which is traditionally exercised within community- and family-oriented Confucian culture such as Vietnam, is insufficient for informed, student-focused and impartial advice. Instead, the process of guidance about post-school pathways needs to comprise dialogic interactions with students and experiences to elaborate and advance what occupations they are suited to rather than relying upon their parents' experiences and perceptions.

A. H. Le (⊠)

Griffith University, Brisbane, QLD, Australia

e-mail: leah.le@griffith.edu.au

Keywords Vocational education and training · Decision making · Career choice · Post-school · Student preferences · Parents' perspective · Teachers' perspective · Survey · Confucian culture · Vietnam

Introduction

In Vietnam, as in other developing countries, the choice between vocational education and training (VET) and higher education (HE) is often portraved as 'VET for the poor' and 'HE for the rich' (Dormeier Freire & Giang, 2012). Thus, while the importance of VET is increasingly being recognised in national discourse and government policies in Vietnam, its standing continues to be low in comparison with other educational pathways, such as HE. This low standing has led to a reluctance for young people to engage in VET, which is proving counter to not only their ability to find employment, but is also to national goals for modernising the economy. In a Confucian heritage society such as Vietnam, family and communities play significant roles in informing and advising young people about post-school¹ pathways (Dormeier Freire & Giang, 2012; Huynh, 2011). The perceptions of parents, in particular, shape how young people elect to engage with and participate in VET provisions (Billett et al., 2022; UNESCO, 2018; UNESCO-UNEVOC, 2018). However, the advice from these familiars is not necessarily impartial and well-informed. The recent reform of VET sector with the introduction of 2014 Law on VET (Law No. 74/2014/QH13), in part, sought to increase the participation of young people in this education provision. However, there is limited research on the standing of VET, especially from those who are influential in guiding the decision-making associated with young people's career and post-school pathway choice. In response, this chapter describes and discusses a small study seeking to understand factors shaping young people's decision-making about post-school pathways and what might be done to redress the low standing of VET and encourage greater participation within it. That is, for young people and those influencing their decision-making to make more informed decisions about post-school pathways. The investigation was conducted in Ho Chi Minh city, a capital city and educational centre in the South of Vietnam and comprised gathering interview and survey data from schoolteachers, school-aged students and their parents. What it found was that there were differences between school students and parents' perspectives and suggestions about VET as a post-school pathway. Overall, it argued that a reliance on the experiences and preferences of immediate family, which is traditionally exercised within community- and family-oriented Confucian culture such as Vietnam, is insufficient for informed, student-focused and impartial advice. The chapter commences with outlining the tertiary education system in Vietnam, distinctions between VET and HE

¹In the Vietnamese context, 'post-school' refers to educational pathways after senior secondary education.

and the national policy aspirations that include VET. Then, it outlines the research method and procedures and describes and discusses the findings from a small qualitative inquiry that captured the voices of young people, their parents, and teachers about how VET can be advanced as a worthwhile post-school option in Vietnam.

Tertiary Education System in Vietnam

To understand post-school pathways and the initiatives in the recent reforms of VET, an overview of Vietnam's tertiary education system is necessary. This section starts with a brief description of the organisation of the tertiary system, followed by that of the VET system then how vocational focus is embedded within VET and HE programs.

Organisation

Vietnam's tertiary education system essentially comprises HE and VET provisions as illustrated in Fig. 11.1. These two systems are distinct in their educational foci with HE being primarily academic-oriented as compared to occupationally oriented VET. That is, academic-oriented HE leads to professional jobs of high status and clean work, whereas VET orienting particular jobs of low standing and limited worth. In a Confucian society such as Vietnam, the former is more respected (London, 2011). Confucianism and its historical legacies have played a vital role on debates about the development of education in Vietnam and of Vietnamese social institutions more broadly² (London, 2011). Noteworthily, two platitudes that highlight the importance of education in Vietnamese culture are: (i) respect for education is essential to the 'Vietnamese character' ('bản sắc người Việt'), and (ii) education is the 'national priority' ('quốc sách hàng đầu'). Taken at face value, these sayings are valid to conclude that education has figured prominently in Vietnam's social history, is a major focus of the country notwithstanding residual problems over the last three decades. It should be stated that a consideration of Confucian is foreshadowed here not because it is the most important to understand the present but because of its early influence on trajectories of educational development in Vietnam. More importantly, it is Confucian heritage that privileges intellectuals, high-status and well-respected professions (London, 2011), which may contribute to undermining the standing of VET.

In terms of organisation, whilst HE is under the jurisdiction of the Ministry of Education and Training (MOET), vocational training in VET colleges is managed

²As Alexander Woodside (1983, p. 401) has argued, "Confucian societies were based on the principle of *chính giáo* ("government" merged with "teaching"), the belief that political leadership and the power of moral and intellectual indoctrination must always be fused together."

through the Ministry of Labour, Invalids and Social Affairs (MOLISA) indicating quite distinct categorisations of utility. As depicted in Fig. 11.1, there are two pathways to obtain vocational-oriented training from school education: VET at tertiary level, including HE programs and VET college programs. It is noteworthy that although there is a pathway across from HE, this is not reciprocated and the level of VET qualifications is not only far lower but offers no pathway to advance into HE.

The tertiary education system consists of public, non-public/private, and foreign-owned institutions. These three types of ownership exist for both VET and HE providers. Only public institutions are partially subsidised and funded by the Vietnamese government in terms of staff salary and investment in facilities. Private institutions operate as for-profit organisations, entirely reliant on tuition revenues in addition to support from the government in tax incentives and access to land for construction of campuses at lower cost (Tran et al., 2014). Given the personal and family financial investments in tertiary education, it is perhaps not surprising that decisions are made about achieving the best outcomes from that investment, including its economic return. Moreover, the cultural preference for HE makes it a more attractive choice when aligned with significant family investment. This is evident when considering the VET system and the provision of vocationalism within HE.

Vietnamese VET System

The Vietnamese VET sector is administered through the Ministry of Labour, Invalids and Social Affairs (MOLISA) (Resolution No. 76/NQ-CP dated 3 September 2016) whose nomenclature might easily be interpreted as conveying a negative connotation. Vietnam's VET programs are hosted in three types of VET institutions: (i) VET centres (i.e., elementary level), (ii) VET secondary schools (i.e., intermediate level), and (iii) VET colleges (i.e., advanced level). The three types of VET institutions are defined in the Law based on their ownership as either public, private and foreign-invested VET institutions. Public institutions are subsidised by the government whereas non-public ones (i.e., private and foreign-invested) are operated on their own fund and based upon student fees.

VET centres offer short (i.e., under-12-month) programs at an elementary level of learning outcomes. Depending on entrance qualifications of students (i.e., junior or senior secondary graduates), VET secondary schools offer intermediate programs of one year duration to senior secondary education graduates and those of 2–3 years duration to junior graduates. Certificates are granted upon graduation from elementary programs. VET colleges offer college training programs of 1–3 years, depending on training specialties and learners who are graduates of senior secondary education or VET secondary schools. Diplomas are granted upon graduation from these college programs. Training offered through VET institutions is often supply driven due to increasing competition among institutions and pressure for student enrolments, not based on industry demand. It focuses persistently on school-based

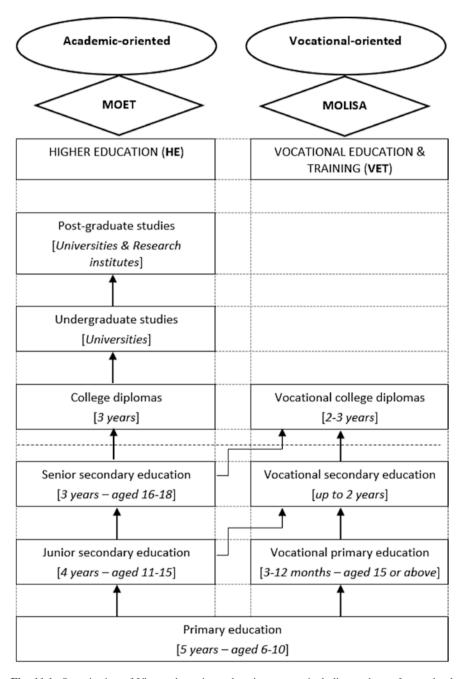


Fig. 11.1 Organisation of Vietnam's tertiary education system including pathway from school education

training delivery with low involvement and participation of enterprises. This approach risks the skills taught not being relevant, making it more difficult for employability.

Occupational Focus in VET and HE Colleges

The current national VET sector at tertiary level consists of 190 VET colleges, awarding 3-year VET diplomas, qualifying for different kinds of jobs such as midlevel technical work, office work or service and sales. Compared to the theoretical orientation focus in programs of higher education institutions (HEIs) (i.e., 216 HE colleges and 237 universities), the VET institutions provide practice-based education and training programs. All programs of study in VET colleges have been developed in accordance with the vocational curriculum framework mandated by MOLISA, just as HE is shaped by MOET. Table 11.1 presents a summary of the differences between the two frameworks for tertiary programs. In the left-hand column are presented the key characteristics of these programs and the columns to their right show how they are manifested in both of these frameworks. The main differences between the two streams under MOET and MOLISA are reflected in the proportions of theory and practice in the curriculum of each stream and the orientation toward generic technical subjects versus more occupation-specific vocational skills. Compared to an absolute occupational orientation (i.e., preparation for specific occupation) in all VET colleges, there are occupation-oriented programs in all HEIs with a lesser specific occupational preparation in universities, with their level of occupational specificity highly dependent on the discipline focus of the university. For example, a discipline such as hospitality would include occupation-based components, whereas a discipline such as science would not necessarily include such components. There is an exception for occupations such as medicine, nursing and law which are only prepared through universities.

MOET and MOLISA both prescribe the objectives, the types of knowledge (e.g., general and occupation-specific) to be learnt, and time allocations to theoretical and practical components in all programs across disciplines. Whilst VET colleges are required to develop vocational training programs based on MOLISA framework, HEIs develop their programs in accordance with MOET framework. As presented in Table 11.1, whilst the allocated time to occupational training is double in VET college programs, the allocated time to general education is almost double in HE programs. This difference in time allocation suggests VET college students have significantly more time to develop and apply their occupation-specific knowledge and skills than their counterparts in HEIs who have been provided with theoretical knowledge. HE students instead spend more time on independent study to complete academic assessments. In this way, there are distinctions in the goals for and processes of education across these two distinct sectors.

In the hospitality discipline, for example, occupation-specific skills required in a hotel (e.g., Front Office, Food and Beverage Department, and Housekeeping) are

		MOLISA	
Aspects	MOET framework	framework	
Institutions under supervision	HE colleges	VET colleges	
Duration	3 years	3 years	
Entrance requirements	High school graduate	High school graduate	
Total time (in 45-min periods)	2110	3750	
Time allocations for general education (in 45-min periods)	805	450	
Time allocations for occupational training (in 45-min periods)	1305	3300	

Table 11.1 Comparison between MOET and MOLISA frameworks for VET programs

taught in the first year of a VET college program. These skills are formulated into practice-based courses, simulating scenarios in different areas of hospitality enterprises. These skills have a narrow focus and are often not officially included in several HE programs. In other words, a VET college program is skill-oriented compared to the more theoretical orientation of an HE program (Tran, 2012; Tran & Swierczek, 2009). For instance, with regard to the occupational foci in hospitality programs, the VET colleges provide skill-based training courses such as 'service skills at the bar/reception', whereas the HE colleges aim at more operational knowledge course such as 'food and beverage service operation' preparing students for both a practical but also future managerial level role. So, there is an implied difference in the focuses of these programs that differentiate development of occupational specific skills with those with a more strategic focus. However, these programs also serve quite distinct purposes associated with national ambitions about advancing the nation's economic base.

Government Legislation and Initiatives in VET

There is a key governmental policy emphasis on modernisation and industrialisation reforms in Vietnam that to enhance the country's standing in ASEAN and competitiveness in the process of international economic integration. Accordingly, the Vietnamese government initiates reform of the operation of VET with an aim to enhance the standing of this important educational sector. These reforms are captured under a law passed in 2006 which sets out the goals for and processes of enhancing the standing of vocational education Vietnam.

The 2006 Law on Vocational Education and Training

(Law No. 76/2006/QH11)

To stimulate the national interest in VET, the government instigated two main actions. First, a new law on Vocational Training (No. 76/2006/QH11) was issued by the National Assembly in 2006. The 2006 law introduced some changes in professional education, changes whose general aims were to better match the educational system with the needs of the labour market in terms of skills and qualifications. A new professional diploma, the 'associate-bachelor' was launched. The aim was to make occupational education, traditionally snubbed by Vietnamese students and families, more attractive by offering a bachelor degree equivalent, thereby professionalising it.

The second action taken was the introduction of privatisation in VET, with three main targets: (1) establishing more private VET schools; (2) sharing education costs and fees (between government and students); and (3) meeting the requirements of the World Trade Organisation. This process achieved a measure of success, including more diversification of training types, more participation of the private sector in VET schools, a threefold increase in VET school numbers, a 3.24-fold increase in student enrolments, and a threefold growth in the number of teachers. So, the move to privatise the provision of VET and establish more institutions led to a significant increase in the percentage of young Vietnamese people participating in this educational sector. However, these initial reforms were augmented with additional reforms in 2014.

The 2014 Law on Vocational Education and Training

(Law No. 74/2014/QH13)

The 2014 law stipulated changes in benefits to private VET sector, subsidies to various learner groups, recognition of prior learning (RPL), and professional titles of VET teachers. Private and foreign-funded VET institutions are also given priority by the government to rent facilities and training equipment, under this legislation. All VET institutions, regardless of their type as private or public institutions, are invited (i) to participate in bidding for training contracts/orders; (ii) to borrow preferential funds from domestic and international projects; and (iii) to send VET teaching and management staff to training programs financed by the state and international organisations. These moves emphasise the marketisation of VET, which, in countries like Australia has not necessarily led to the heightening of its standing as an educational sector (Billett, 2020).

Subsidies in the form of tuition waiving are applicable for young people who are beneficiaries of favourable social policies and state benefits, general lower secondary school graduates, learners of occupations with low rate of admission, but in high demand, and learners who want to learn special technical skills. In this way, these policies are targeting disadvantage students, but also seeking to redress limits in the supply of VET graduates in the areas of growing demand. Hence, these efforts are seeking to enhance the supply-side in addressing demand-side problems. The

introduction of recognition of prior learning (RPL) is being used to certify the knowledge and skills accumulated by students during their working life and the learning results of those modules, credits and subjects accumulated by them during the learning process. Learners who belong to equity groups are entitled to government-funded boarding school when pursuing a VET program. These students upon graduation are then given priorities during recruitment process.

There are clear regulations on the titles of teachers working in VET institutions. Accordingly, those who teach in VET centres and VET secondary schools are called teachers while those who teach in VET colleges are called lecturers. The 2014 Law also regulates policies on honouring VET teachers and policies for the prolongation of their working time. Meanwhile, enterprises participating in VET activities are entitled to corporate income tax deduction. So, these initiatives are focused at moderating the supply and demand issue, and also seeking to develop a mature VET workforce. However, alongside these reforms, further initiatives have been introduced.

Vocational Training Development Strategy Period 2011–2020 with an Orientation to 2030

(No. 630/QD-TTg of the Prime Minister dated 29 May 2012)

In 2011, Vietnam's Socio-Economic Development Strategy was reviewed for the first millennium decade and concluded that, despite some basic achievements, the economy had not developed as envisaged, in particular the quality of growth, productivity, effectiveness and competitiveness of the economy was rated as low (Government of Vietnam, 2011). A revised strategy, providing overall guidance, key target areas, and policy objectives for the following sequence of two 5-year Socio-Economic Development Plans (2011–2015 and 2016–2020), retained the state apparatus responsible for further substantial system improvements by focusing on three "strategic breakthrough" components: (i) improved socialist-oriented market economy regulations and respective administrative reforms; (ii) rapid development of high-quality human resources through comprehensive renovation of the national education system; and (iii) development of a synchronous and modern (traffic and urban) infrastructure system.

Human resources development (HRD) is one of the three strategic breakthrough solutions in which VET quality is regarded as a critical element of national socioeconomic development. Vietnam adopts the principles of "radical and comprehensive educational renovation", including VET, which poses a new opportunity for VET development. As stated in the strategy plan, by 2020, VET aimed to meet the labour market's demands in terms of quantity, quality and vocational structure and qualifications. The quality in some trades was anticipated to reach the standards of advanced countries to form a force of skilled labourers to help improve the national competitiveness and to realise universalisation of VET for labourers. This strategy

plan aimed to contribute to restructuring the labour force, raising the income to alleviate poverty in a sustainable manner, thereby ensuring social security. The plan contains a comprehensive list of tasks and solutions grouped into nine major areas, which seem to concentrate more on regulative standardisation rather than on solutions dealing with the concrete implementation requirements of standards: (i) building National Vocational Qualification Framework (NVOF); (ii) renovating state management of VET; (iii) planning and developing the network of VET institutions; (iv) ensuring the quality of VET, including developing VET teachers, instructors and managers, developing curriculum and syllabuses and enhancing vocational facilities and equipment; (v) control of VET quality, including VET quality accreditation and assessment and certificates of national skills; (vi) linking VET with the labour market and the participation of enterprises; (vii) mobilising resources for the VET sector; (viii) raising awareness of VET development; and ix) promoting international cooperation in VET. Among these nine solutions, the first two have been prioritized as "breakthrough solutions" affecting the quality of the whole VET system, while the third (focusing on occupational standards and NVQF) was seen as key for a comprehensive VET system reform. Overall, these targets set in this strategy aim to enhance the standing of VET to attract participation in VET. However, scale and structure of VET enrolments has not met the strategy's objectives and consistently declined over the years (MOLISA, 2017). Enrolment rates at primary VET account for 88%, and at intermediate and college level only for 12%. Enrolments in courses for heavy, hazardous, and talented occupations are very low.

Ongoing Reforms Yet Persistent Societal Sentiment About the Low Status of VET

Despite the government's efforts during the last decade to improve quality and relevance of this educational sector, the entire VET system remains unappealing to prospective investors and households. Five essential problems characterising the overall development status of Vietnam's VET system include: (i) insufficient enterprise-based training, (ii) wrong skills taught, (iii) skills not taught properly, (iv) inequitable access, and (v) less-than-effective organisation and management of skills development (ADB, 2014, 2020). Although promoting VET remains a high priority across different legislations and policy frameworks, including incentives to channel post-school enrolments into VET, young people's preference for universities seems to strongly challenge the attraction to VET. There appears also to be a continuing mismatch between supply and demand along with limited attractiveness, quality, and relevance of VET programs at different levels. All stakeholders including students and parents, employers, and public authorities still perceive the role and importance of VET to be inadequate for society and the economy (ADB, 2020). Its reputation compared with other subsectors providing general and HE

qualifications is still low. Such societal sentiment about VET's standing has been identified as one of the main causes for the sector to miss its strategic targets. Thus, to gain insights into this issue, there is a need to identify how VET can be viewed as being a worthwhile, viable and potentially attractive post-school option for young people. This requires understanding the decision-making processes young people participate in and the influences on that decision-making. Perhaps only through understanding these processes and factors will it be possible to identify strategies to enhance the standing of VET.

Perspectives on the Standing of VET in Vietnam

The relatively low standing of VET is of global concern for its impact on young people's engagement in this important educational sector and the occupations it serves (Billett, 2014). This concern is acknowledged across countries with developed economies (Cedefop, 2014; Clement, 2014) and developing economies (Billett & Le, 2022; UNESCO-UNEVOC, 2018). The heightened aspirations of young people and their parents, globally, does much to reinforce and entrench VET and the occupations it serves as a less- or non-preferred post-school option in a range of countries (Clement, 2014; UNESCO-UNEVOC, 2018). The consequences of this low standing can be profound, especially for young people. A growing proportion of young people in many countries are not considering or engaging with VET. The consequences include mismatches of the capacities being developed through HE and the available employment opportunities (Schweri et al., 2020; Somers et al., 2019), and the potential for extended and circuitous post-school pathways for young people (Billett, 2014).

In Vietnam, another problem emerges. There are many HE graduates who decided to enrol in VET programs for further skill training due to the lack of employment opportunities in the fields they were trained in their HE programs (Huynh, 2011). Furthermore, a large number of HE students dropped out of their degree programs after one or 2 years of enrolment (Nguyen, 2011). Such consequences questions whether the post-school decision made by these young people is wholly informed and helpful. In fact, research (e.g., Nguyen, 2011; Pham, 2016; Phung, 2014) indicates that career counselling at different levels (i.e., schools, families and relevant associations) has failed to assist school students in making informed decisions. Indeed, like elsewhere, the changing preference to engage in HE rather than VET is a product of a range of broad social factors, including high aspirations and sentiments about education and work manifested by practices exercised within schools, families and interactions with familiars (i.e., parents, teachers, friends) (e.g., Baxter 2017; Billett et al., 2022; Bisson & Stubley, 2019; Bowen & Kidd, 2017; Brown, 2017; Clement, 2014; Galliott, 2017; Gore et al., 2017; Lamb et al., 2018).

Many studies concluded that familiars, and, in particular, family members, directly or indirectly influence decision-making about post-school pathways (Billett

et al., 2020; Clement, 2014). Direct influence from engaged parents who have views about such pathways. Indirect influences arise from what is observed, heard and otherwise experienced by young people. Clement (2014) identifies four key influences on young people's decision-making about post-school pathways: (i) parents, (ii) schoolteachers, (iii) work experience, and (iv) school guidance officers. These are all close or proximal and potentially influential sources of advice. Parents are reported in most studies to be the key influences on young people's decision-making (Clement, 2014; Ulrich et al., 2018). In a community- and family-oriented Confucian society such as Vietnam, family, friends and communities undoubtedly play significant roles in shaping young people's educational choices (Dormeier Freire & Giang, 2012; Huynh, 2011).

In most situations, parents are the key determinants in the processes of educational choice whereas in some cases, those with limited educational background consult with other family members. Findings from an investigation of the role of family in young people's decisions about post-school pathway in a northern region of Vietnam (Dormeier Freire & Giang, 2012) suggest a strong link between parental education, social connections and the support parents give to their children's education starting from childhood, as well as their involvement in educational choices. Parents with a higher educational background have significantly stronger concern and take a more active role, by attending school-parent meetings, talking to their children, monitoring their performance, and being pleasant towards their children's friends (Dormeier Freire & Giang, 2012; Ha & Nguyen, 2012; Le, 2000). They may even give up their jobs if required, accept a lower remuneration or restrain their professional ambitions to allocate more time to their children's studies. Indeed, how parents monitor, and are involved in, their children's education differs. Parents with higher education believe that time, talk, discussion and providing their children with information are important. Less-educated parents, on the other hand, tend to be uncomfortable and less confident with educational issues, partly because their educational background is lower. They focus all their efforts on securing income to provide a good standard of living and savings for the future. To some extent, given their own limited education, they are doubtful that their children can benefit or learn anything from them. Significantly, in contrast to parents with a higher social position and income, these parents see investment in education as a bigger risk with more uncertain social returns (Dormeier Freire & Giang, 2012).

What is being suggested to young people, either explicitly or implicitly through everyday conversations and interactions with parents, teachers, and other familiars, may come to influence their decision-making about post-school pathways. Yet, this decision-making does not necessarily progress in an informed and considered way. Instead, it is premised on the personal experiences and preferences of parents and teachers (Billett et al., 2020). For example, in Vietnam, parents hold a poor perception of the standing of VET and perceive this to be the last resort, the educational pathway for academically weak students, the destination for those who failed the university entrance examination, and one for those with low socioeconomic background, or the option to avoid being conscripted into the army (Dang, 2015). Such parental perspectives result from low image and awareness of VET in

the Vietnamese society (Dang, 2015; Dormeier Freire & Giang, 2012; Nguyen Tuan & Nguyen Cuong, 2019). This seems to be a persistent issue across the country, especially in the era of high aspiration in which young people and their parents desire high status, clean and well-paid occupations (Billett, 2020) that are often considered to be the outcomes of university qualifications. Indeed, many young people in Vietnam are often under their parents' pressure to progress to HE to attend university degrees at the expense of their preference and capacities (Dang, 2016; Huynh, 2011).

The risk here is that what is preferred and privileged by familiars who are in positions of potential power and influence (e.g., parents, teachers) may lead to uninformed decision-making and not being premised on young people's interests and capacities. Despite efforts of ongoing reforms of the sector, the standing of VET is not deemed to be improving in the eyes of these familiars (Nguyen Tuan & Nguyen Cuong, 2019). Particularly, since the release of 2014 Law on VET, there is limited empirical research on perspectives from schoolteachers, students and parents about the standing of VET. Previous research in this area was conducted in northern and southern regional cities (Dang, 2015), not including major capital cities such as Hanoi and Ho Chi Minh (HCM), which are educational centres of the country. Young people often come to these cities, HCM in particular, for their post-school education. Also, the information about post-school pathways is presumed to be communicated more effectively to those residing in these educational centres. For such reasons, it is important to understand factors shaping young people's decisionmaking about post-school pathways through the lens of this case study. Hence, this study will contribute to knowledge about the issues with VET status in this urban area.

Perspectives on Informing Post-School Pathways: A Vietnamese Case Study

The study processes and findings are described and discussed here sought to understand the factors shaping young people's decision-making process associated with post-school pathways and what kinds of interventions might be helpful in presenting VET as a viable pathway for many young people. The qualitative study engaged a cohort of schoolteachers, school-aged students and their parents from Ho Chi Minh, the capital city in the South of Vietnam.

Procedures

The data gathering comprised of participation in an anonymous online survey and interviews via an online platform (i.e., Zoom). Virtual snowball sampling technique was used to recruit participants for this study. That is, an invitation to interviews and online survey link was posted on social media (i.e., Facebook) then the researcher's friend contacts assisted circulating the recruitment to their social networks. A convenience sample of seven interviews and 87 completed surveys were collected for analysis. The survey used in this study is a translated version of the survey developed in a project funded by the Queensland Government seeking to enhance the standing of VET in Australia (Billett et al., 2022), though translated into the Vietnamese language. Permission to use the survey was sought and the study subject to strict ethical clearance requirements through university processes and informed consent (GU ref. no: 2017/693).

Translation of a research instrument into other languages is important in preparing instruments for use in different cultures (Hilton & Skrutkowski, 2002). The rigour of the translation process aims to ensure the equivalence of the meaning of the survey items in the translated version (i.e., Vietnamese), to the meaning in the original language (i.e., English) (Endacott et al., 2010). In this study, the translation of the survey was performed using a blind, back-translation process (Duffy, 2006). The Vietnamese version was pilot tested with eight Vietnamese parents who had high school-age children in Vietnam: four higher-educated and four less-educated parents. They were asked to complete the survey and provide feedback on the comprehension and clarification of the questions and items used in the survey. Modifications and changes were then made to reflect the feedback provided by the parents.

In addition to questions seeking demographic background, the survey comprised questions using five-point Likert scales to measure (i) levels of influence of different stakeholders on young people's decision-making about post-school pathways; (ii) levels of importance on messages promoting the standing of vocational education, and (iii) levels of effectiveness with means of presenting informed and positive messages. The administration and distribution of the survey was facilitated through school and institutional contacts and through social media.

The overall orientation of the data collection and analysis was to identify sources and factors shaping young people's decision-making about post-school pathways. This required gaining insights from senior secondary schoolteachers, students and their parents about their perspectives and influences on that decision-making, and importantly how to make VET more attractive to young people and those who influence their decision-making. The findings from interviews and online survey are presented and discussed in the following sections.

Informing Post-School Pathways: Findings from Interviews

Interviews with schoolteachers and parents provided a range of perspectives informing and influencing young people's decision-making about post-school pathways. In overview, parents' and teachers' own experiences and aspirations were central in shaping the kinds of advice that were given to school-aged children.

Generally, VET was not perceived as an attractive post-school option. Except for students whom they designated as being likely to participate in VET because of a lack of success in schooling, teachers seemingly emphasised progression onto university as the default post-school pathway. It is understandable and might be expected that teachers would encourage students to do as well as they can and try and achieve the highest-level post-school outcome that is possible. So, this preference may go beyond a reliance on their own experiences and be the exercise of teachers who want the best possible outcome for their students. Again, perhaps this finding is not surprising given what has been stated earlier about the relatively low standing of VET and the occupations it serves. Certainly, this could be the exercise of their professional obligations. That is, these teachers are working to position their students as having the best opportunities for engaging in what they believe to be well-regarded and well-remunerated work. Such professional obligations and commitment were even more strongly required in 'schools for the gifted' (i.e., private schools). School policy on promoting VET pathways varied across schools. Private schools are unlikely to promote VET as a worthwhile postschool option. This is out of concerns about meeting parents' high expectations, the perceived public image of the school for academic achievement. Student enrolment in VET courses disrupted a school's academic profile. A mother and teacher at a private school stated:

It is competitive to get entry into our school [school for the gifted]. Those attending our school often have outstanding academic records so for sure they would aspire for universities. It is very rare that they would consider VET. Also, our school has gained its reputation for having very high rate (sometimes 100%) of students to successfully get entry into universities.

As a mother, this teacher recognised the importance of 'freedom of choice', realising her children's aspirations and wanted this to be exercised within high-status occupations, presumably those requiring university qualifications. Such aspirations for their children sometimes resulted in strict monitoring and control of these children's choices. An extreme case involved parent enforcement on her children progressing onto university regardless of their preference and capacities, even though she herself was engaged in low-skilled work (i.e., doing packaging in a small factory):

It's my family tradition that my children must go to university. Although they always started with indicating that they wanted to study in VET, it was always a No from me – I told them you have to get entry into university [...] They can do whatever they want but it must be through university qualifications. – Mother, low-skilled worker.

This mother was concerned about her children's studying in VET, stating that it is "tội" (i.e. pitiful) for them to start work at such an early age. VET is understood as an environment where students have to work while studying thus this mother would feel pity ("tội") for her children. Similarly, another mother, a businesswoman, showed her concern about the impact of VET environment on a child's social skill development, stating:

When studying VET, they [children] see themselves as workers, not students thus they become lack of social interactions, limiting their social skills development as compared to university students. – Mother, business owner.

A possible explanation for this parental control of their children's educational choices could relate to the role of education in a Confucian society such as Vietnam, where it is a pillar of the moral code is to follow and not question the social order. In this case, education is perceived as a 'destiny' and an 'honour' that an individual has to fulfil on behalf of the whole family that support them. In this respect, education itself is understood as an opportunity to gain a better social position which is assumed to solely base on a university qualification. It is, however, seldom seen as a means of emancipation as intergenerational payback (i.e., financial and symbolic) is an important social mechanism in Vietnam (Dormeier Freire & Giang, 2012). That is, from their own childhood experience of hardship, many Vietnamese parents are determined to invest in their children's (university) education to help them escape a life of poverty and farming.

In other cases, parents indicated that it was their own experiences that limited their understanding and extent of advice. They reached out for legitimate and trusted sources of information such as schools, universities and their social connections. Findings from this study emphasised schools and teachers as entrusted sources of advice for many parents.

I don't tend to involve too much in helping my son with his homework like others would, but I follow the parent group on Facebook to know more about what is happening in school and his friends. And I attend all school-parent meetings to talk to his teacher-in-chief. I have learned more about my son and what he wants from these conversations. — Mother, housewife.

Indeed, teachers were listened to and engaged by parents in the discussion of post-school options for their children. It is not clear about the influence of teachers on students' decision-making of post-school pathways, but the interview data showed that teachers' opinions and advice were appreciated by parents and somehow shaped the advice about educational choices parents would give to their children. A mother and teacher at a public school stated:

Some parents are very attentive to their children and genuinely seeking for advice from teachers during school-teacher meetings. I personally support freedom of choice for students. Let them do what suit and interest them. I advise the parents of those students having lower academic achievements to think about VET instead of pressing their children to university pathway. They should consider VET as a stepping-stone to university. – Mother, public-school teacher

When making the choice of VET for their children, parents often advocate the practicality and employment outcome of VET. A father shared:

We're not wealthy, so my son will enrol in a VET course in refrigeration and air conditioning. There is a high demand for this job. I have asked around and advised my son about this and he likes it too. – Father, low-skilled worker

VET pathway is also perceived to be an escape from the pressure of achieving high academic results to gain entrance into universities. A mother raised the issue of suicidal tendencies among teenagers:

It was so scary thinking about it. Some kids committed suicides just because they failed some major exam and got low marks for some subjects. It must be pressure from family for them to achieve highly in schools. I don't want to do that to my son. He can do whatever he wants. He can do VET or even take a gap year to sort out what he wants. — Mother, dentist

Overall, the interview data indicated that there was not lack of understanding about the range of available pathways. The reality is if students are able to secure university entry, this becomes the desired and default post-school option. Teachers' and parents' own experiences and aspirations were central in shaping the kinds of advice given to their children. Teachers interviewed were quite candid about their preferences for their students to progress onto HE and that VET was a less desirable outcome and only for low academic achieving students. This preference is exercised institutionally as part of their professional obligations. Parents' aspirations of clean and high-status occupations for their children seem to be the product of societal sentiments privileging university pathways and also preference and expectation of parents. Such findings are not surprising given what has been stated earlier about the relatively low standing of VET and the occupations it serves.

So, it is critical to gain insights into how to enhance the standing of VET to attract young people to this important educational sector. It is also important that this process needs to take into account perspectives of young people and their parents who are the primary actors influencing young people's decision-making about post-school pathways. Their views from the online surveys are reported below.

Attracting Young People to VET: Findings from Surveys

The respondents to the survey comprised of 31 school students and 56 parents. A summary of the characteristics of the respondents is shown in Table 11.2. Descriptive analysis was conducted with the survey data to generate the mean scores of responses from the two informant groups. Then comparative weightings (i.e., mean scores) between the two cohorts are represented through rankings.

The survey data were used to identify and rank: (i) influential others in school students' decision-making about post-school pathways, (ii) messages to promote the standing of VET, and (iii) how the presentation of informed and positive messages about VET might be achieved. In the sections below, each of these sets of findings are presented and briefly discussed.

Variable	Values	Student (n = 31)	Parent (n = 56)
Gender	Male	15	17
	Female	16	39
Age	15–19	31	0
	20–29	0	1
	30–39	0	20
	40–49	0	30
	50-59	0	4
	60+	0	1
Highest qualification	Highschool diploma	0	21
	Vocational certificates	0	4
	Bachelor degree	0	1
	Post-graduate degree	0	20

Table 11.2 Characteristics of the respondents

Table 11.3 The influences on decision-making about post-school pathways

			School students		Parents	
	Actors	Rank	Mean	Rank	Mean	
1	The students themselves	1	4.57	3	3.61	
2	Immediate family (such as parents, carers, siblings)	2	3.33	1	4.00	
3	Entertainment media such as movies and TV shows	3	3.19	2	3.79	
4	School teachers	4	3.10	4	3.61	
5	Students'friends	5	2.81	5	3.52	
6	School guidance officers	6	2.71	7	3.18	
7	Other media such as news stories	7	2.67	8	3.09	
8	Extended family	8	1.86	6	3.46	

Influences on Decision-Making

Interview findings suggest that parents are highly influential and in Vietnamese culture, parents tend to decide for their children about post-school pathways and sometimes enforce such decision-making on them. In the survey, respondents were asked to rate the influence of different stakeholders on young people's decision-making about further study and future careers, including (a) immediate/extended family, (b) schoolteachers/guidance officers, (c) peers, and (d) media. The findings are presented in Table 11.3, ranking the averaged responses (i.e., mean scores) between school students and parents. In this table, the actors that influenced the decision-making are listed in the left column and are ranked on students' preferences as bases for comparing those of the parent group.

Immediate family, including parents, carers and siblings are rated second by students and first by parents among the sources of influence on young people's decision-making about post-school pathways. This is in congruence with most studies emphasising the key role played by family, particularly parents, in decision-making

(Bowen & Kidd, 2017; Brown, 2017; Clement, 2014). And this is not surprising in a Confucian culture such as Vietnam where family plays an important role in shaping young people's educational choices (Dormeier Freire & Giang, 2012; Huynh, 2011). Interestingly, whilst the students rated themselves first, they are rated third by parents. This suggests that young people prefer the autonomy to make their own educational choices. Indeed, these students took little note of extended family, giving them the lowest ranking whereas this group of actors seem to play a more important role from parents' perspective (i.e., being ranked 6th out of 8 by parents). These findings suggest that the Vietnamese societal changes are reflected in the relationships between family members. The primary parental role in decision-making about post-school pathways seems to take second place. Children now have stronger voice and are more active in the formation of choice. The booming economy and the transition from agriculture to industries and services provide young people with a completely different outlook as compared to their parents' (Dormeier Freire, 2009). These new opportunities, offering children perspectives of additional emancipation, can cause conflicts with the more traditional choice system that is based on the family's preferences and social interests (Dormeier Freire & Giang, 2012).

Messages to Promote VET

Participants were asked to rate the importance of a list of messages needing to be communicated to school students to encourage them to consider VET as a worthwhile and viable post-school pathway. The findings are presented in Table 11.4, ranking the averaged responses (i.e., mean scores) between school students and parents.

Table 11.4	The important	e of messages to	encourage young	people to engage in VET

		School	students	Parents	
	Messages	Rank	Mean	Rank	Mean
1	Is delivered in a friendly learning environment	1	4.43	7	3.38
2	Leads to good job prospects	2	4.33	2	3.91
3	Courses suit all genders	3	4.24	11	3.07
4	Leads to stable jobs	4	3.81	4	3.73
5	It is a high-quality, well-respected post-school option	5	3.67	5	3.46
6	Classes are practical	6	3.62	1	3.98
7	Leads to interesting and worthwhile jobs	7	3.38	8	3.34
8	Students can study a wide range of courses	8	3.10	3	3.84
9	It can be a stepping-stone to university.	9	2.90	10	3.25
10	Is a good option for smart students	10	2.81	6	3.41
11	Leads to well-paid jobs	11	2.57	9	3.30
12	Courses are easy to get into	12	2.52	13	2.55
13	Is a good first-choice	13	2.40	12	2.61

It can be seen from Table 11.4 that there is a big gap³ between students' and parents' rankings of 6 out of 13 messages. This finding suggests considerable difference in perception of young people and parents about what might include the worth and viability of VET as a post-school option. For example, whilst students rated highly messages such as VET being 'delivered in a friendly learning environment' were rated highly by students (i.e., ranked 1st) and 'Courses suit all genders' (i.e., ranked 3rd), parents indicated quite different views about these, ranking them 7th and 11th respectively. There is also a disparity between the ranking of 'Classes are practical' and 'Students can study a wide range of courses' by the two groups – parents rated highly the importance of these messages (i.e., 1st and 3rd) which were rated lower by students (i.e., 6th and 8th). The variance in ratings indicates a difference in perspectives across generations, wherein adults perceive VET as a less attractive post-school pathway. This aligns with findings reported by Choy et al. (2022) in the Australian study. This finding resonates with Aarkrog's (2020) suggestion of the difference across generations in their approach to selecting occupations. Together, these findings suggest some potential practical implications arising from differences in these rankings between the school students and parent groups. As the school students are the subject of these messages, the differences between the preferences of students and parents who provide close guidance and influence is concerning as how this might lead to distorting the decision-making process and, potentially, restricting the perspectives and decision-making of school students.

Presentation of Informed and Positive Messages

Participants also ranked a list of means for presenting positive messages about VET in terms of their likely effectiveness in achieving the intended outcome. The ranked responses (i.e., means scores) are presented in Table 11.5.

In contrast to views about influencing young people's choice of post-school pathways, there is general consensus in the rankings of how messages about enhancing the worth of VET should be projected between the student and parent respondents. That is, there is general agreement at both the top and the bottom of the rankings. What appeared to be common about these responses is that the means that can be experienced directly and mediated (i.e., 'Exposure to a range of work situations while still at school' and 'Exposure to different institutes and education facilities') were deemed to be more effective than those that were not mediated by respondents (i.e., 'wide advertising', 'online materials' and 'printed materials'). Again, this finding aligns with Choy et al.'s (2022) Australian study. This finding also supports Haybi-Barak and Shoshana's (2020) critique of social marketing in encouraging participation in VET, as such an initiative could only be effective with an improved societal sentiment about the attractiveness of VET. Noteworthy here is the disparity between school students' ranking of 'Promoting role models who have successful

³Two or more ranks difference

		School students			ts
	Means	Rank	Mean	Rank	Mean
1	Exposure to a range of work situations while still at school, to help with career decisions	1	4.38	1	4.00
2	Exposure to different institutes and education facilities (e.g., visits to VET institutes)	2	4.14	2	3.84
3	Schools providing more personalised career information about VET jobs	3	3.24	4ª	3.77
4	Wide advertising (e.g., TV, radio, social media)	4	3.00	4 ^a	3.77
5	Promoting role models who have successful careers after completing VET qualifications	5	2.90	3	3.79
6	Online materials that are easy to access	6	2.90	6	3.64
7	Simple, easy to understand printed materials (e.g., brochures, guidebooks)	7	2.00	7	2.70

Table 11.5 Means of presenting positive messages to young people about studying in VET

Note: aResponses having the same mean scores

careers after completing VET qualifications' and that from parents. Whilst this was ranked 3rd by parents, it was less privileged by school students (i.e., ranked 5th). This finding of student preference emphasises the possible effectiveness of the processes that can be mediated and experienced directly.

These group differences again highlighted the gap in perceptions between school students and their parents. Such a gap could mean that expectations about the sources of influence on young people's decision-making about post-school pathways, such as peers and media, might be misleading. The expression of personal preference of the parent group was seemingly predominant, rather than conscious efforts to be impartial about diverse post-school pathways.

Informing Young People's Decisions About Post-School Pathways

Overall, the findings from this study showed that these parents were not generally knowledgeable about VET and had increasing preference for university studies. Similarly, teachers were not always knowledgeable about VET or the occupations it serves and were professionally and socially obliged to encourage students to achieve the highest academic outcomes as possible to progress onto HE hence VET was a less desirable outcome. Parents in this study saw teachers as an entrusted source of advice, including career counselling and decision-making. This has important implication for schools to develop strategies to enhance teachers' and parents' knowledge of VET and parents' engagement with schools to promote VET as a worthwhile and viable post-school option. More importantly, schools should consider policy that VET is regarded as a legitimate choice – just as for university entry.

The findings from the survey indicated differences between school students and parents' perspectives and suggestions about VET as a post-school pathway. These findings suggest that a reliance on the experiences and preferences of immediate family (i.e., parents), which is traditionally exercised within community- and family-oriented Confucian culture such as Vietnam, is insufficient for informed, student-focused and impartial advice. Instead, the process of guidance about post-school pathways needs to comprise dialogic interactions with students and experiences to elaborate and advance to occupations they are suited to rather than relying upon parents' experiences and perceptions.

In Vietnam, the societal changes brought by a Western lifestyle, consumerism and individualism have waned the relationship between individuals and family (Dormeier Freire, 2009). Notwithstanding, this study shows that the family unit still has a strong impact on young people's educational choices. However, young people have their own preferences and exercise their own decisions about the educational pathways which best suit their capacities and interests. In other words, they may no longer tolerate enforcement or being organised into an educational choice or career pathway based on family preferences. To maintain the positive relationship between individuals and family and for young people to benefit from these decisions, it would be helpful for parents and influential others to enact processes to assist young people in a more informed and impartial deliberation about preferred occupations and post-school pathways. Given the considerable parental influence on young people's decisions in the Vietnamese culture, it is important that young people feel supported by their parents. Parental encouragement would prompt personal fulfilment through self-actualisation and linked the career advice to appreciation of students' capabilities (Powers & Myers, 2017). In general, students seem not very knowledgeable about VET as a post-school option. Indeed, research (e.g., Dalley-Trim et al., 2008; Gore et al., 2017) showed that students' lack of knowledge of VET as post-school options is sometimes due to lack of guidance on where to look for it, and sometimes to their disengagement from career advice processes. Perhaps schools can develop processes to enhance students' knowledge of VET, strengthening their self-accountability. As noted, there is a risk that uninformed decision-making about these pathways can have deleterious consequences for young people and may, in an era of high aspiration of parents and young people, lead to a misalignment between tertiary education provisions, participation and outcomes, and requirements within working life.

References

Aarkrog, V. (2020). The standing and status of vocational education and training in Denmark. *Journal of Vocational Education & Training*, 72(2), 170–188.

Asian Development Bank (ADB). (2014). Technical and vocational education and training in the Socialist Republic of Vietnam: An assessment. Manila.

Asian Development Bank (ADB). (2020). Vietnam: Technical and vocational education and training sector assessment. Manila.

- Baxter, J. (2017). Chapter 2: The career aspirations of young adolescent boys and girls. In *The longitudinal study of Australian children annual statistical report 2016*. AIFS.
- Billett, S. (2014). The standing of vocational education: Sources of its societal esteem and implications for its enactment. *Journal of Vocational Education & Training*, 66(1), 1–21.
- Billett, S. (2020). Perspectives on enhancing the standing of vocational education and the occupations it serves. *Journal of Vocational Education & Training*, 72(2), 161–169.
- Billett, S., Choy, S., & Hodge, S. (2020). Enhancing the standing of vocational education and the occupations it serves: Australia. *Journal of Vocational Education & Training*, 72(2), 270–296.
- Billett, S., & Le, A. H. (2022). Chapter 4: Improving the standing of VET: Perspectives from countries with developing economies. In S. Billett, B. E. Stalder, A. Vibe, S. Choy, S. Hodge, & A. H. Le (Eds.), *The standing of vocational education and the occupations it serves: Current concerns and strategies for enhancing that standing*. Springer.
- Billett, S., Choy, S., Hodge, S., & Le, A. H. (2022). Chapter 15: Investigating enhancing the standing of vocational education and the occupation it serves: Purposes, processes and phases. In S. Billett, B. E. Stalder, A. Vibe, S. Choy, S. Hodge, & A. H. Le (Eds.), The standing of vocational education and the occupations it serves: Current concerns and strategies for enhancing that standing. Springer.
- Bisson, R., & Stubley, W. (2019). After the ATAR: Understanding how Gen Z transition into further education and employment. Year13. https://youthsense.com.au/research. Accessed 1 July 2021
- Bowen, G., & Kidd, E. (2017). Career guidance: The missing link in school to work transitions. Youth Action.
- Brown, J. (2017). In their words: Student choice in training markets Victorian examples. NCVER. Cedefop. (2014). Attractiveness of initial vocational education and training: Identifying what matters (Cedefop research paper no. 39). Publications Office of the European Union. https://www.cedefop.europa.eu/files/5539_en.pdf. Accessed 1 July 2021
- Choy, S., Le, A. H., Billett, S., & Hodge, S. (2022). Chapter 17: Surveys of students, parents and teachers (phase 2). In S. Billett, B. E. Stalder, A. Vibe, S. Choy, S. Hodge, & A. H. Le (Eds.), *The standing of vocational education and the occupations it serves: Current concerns and strategies for enhancing that standing*. Springer.
- Clement, U. (2014). Improving the image of technical and vocational education and training. Federal Ministry for Economic Co-operation and Development. https://www.dcdualvet.org/wpcontent/uploads/2014_GIZ_Improving-the-Image-of-Technical-and-Vocational-Education-and-Training_A-synthesis.pdf. Accessed 1 July 2021
- Dalley-Trim, L., Alloway, N., & Walker, K. (2008). Secondary school students' perceptions of, and the factors influencing their decision-making in relation to, VET in schools. *The Australian Educational Researcher*, 35(2), 55–69.
- Dang, V. H. (2015). Parental perspectives towards the vocational education training sector in Vietnam. *Journal of Education and Vocational Research*, 6(1), 37–51.
- Dang, Q. D. (2016). Characteristics of Vietnamese people in human resources training. *Journal of Vietnam Academy of Social Sciences*, 10(107), 23–29.
- Dormeier Freire, A., & Giang, H. T. (2012). The role of family in vocational education and training choices: A case study in Vietnam. *International Studies in Sociology of Education*, 22(3), 237–257.
- Dormeier Freire, A. (2009). Motorbikes against Ho Chi Minh? Or the icons of a social transformation in Vietnam. *The Copenhagen Journal of Asian Studies*, 27(1), 67–87.
- Duffy, M. E. (2006). Translating instruments into other languages: Basic considerations. *Clinical Nurse Specialist*, 20(5), 225–226.
- Endacott, R., Benbenishty, J., & Seha, M. (2010). Preparing research instruments for use with different cultures. *Intensive and Critical Care Nursing*, 26(2), 64–68.
- Galliott, N. (2017). Online career guidance: Does knowledge equate to power for high school students? *Journal of Psychologists and Counsellors in Schools*, 27(2), 190–207.
- General Statistics Office of Viet Nam (GSO). (2016). Major findings The 1/4/2015 time-point population change and family planning survey. Ha Noi. https://www.gso.gov.vn/Default_en.aspx?tabid=51. Accessed 1 July 2021.

- Gore, J., Ellis, H., Fray, L., Smith, M., Lloyd, A., Berrigan, C., Lyell, A., Weaver, N., & Holmes, K. (2017). Choosing VET: Investigating the VET aspirations of school students. NCVER.
- Ha, T. D., & Nguyen, N. A. (2012). Orienting children's learning and career by inhabitants in the Mekong Delta. *Journal of Sociology*, 7(167).
- Haybi Barak, M., & Shoshana, A. (2020). Separatist biopolitics: The dual discourse of the vocational education policy in Israel. *Journal of Vocational Education & Training*, 72(2), 297–314.
- Hilton, A., & Skrutkowski, M. (2002). Translating instruments into other languages: Development and testing processes. *Cancer Nursing*, 25(1), 1–7.
- Huynh, V. S. (2011). Existing career choice tendency of senior students in lower and upper secondary schools in Binh Duong. *Scientific Journal of Ho Chi Minh City University of Education*, 31, 125–131.
- Lamb, S., Maire, Q., Walstab, A., Newman, G., Doecke, E., & Davies, M. (2018). Improving participation and success in VET for disadvantaged learners (Research report). National Centre for Vocational Education Research (NCVER).
- Le, M. N. (2000). The role of rural families in the employment of young people. *Journal of Sociology*, 2(70), 30–36.
- London, J. D. (2011). Contemporary Vietnam's education system: Historical roots, current trends. In J. D. London (Ed.), *Education in Vietnam* (pp. 1–56). Institute of Southeast Asian Studies Press.
- Ministry of Labour, Invalids and Social Affairs (MOLISA). (2017). Project on renovation and improvement of the quality of technical and vocational education and training Up to 2020, with orientation to 2030. Hanoi.
- Nguyen, T. T. H. (2011). The current status of career counselling in high schools located in Ho Chi Minh City. *Ho Chi Minh City University of Education Journal of Science*, 25, 116–120.
- Nguyen Tuan, D., & Nguyen Cuong, H. (2019). Technical and vocational education and training (TVET) in Vietnam. In *Vocational education and training in ASEAN member states* (pp. 229–256). Springer.
- Pham, D. K. (2016). Vocational education management in high schools under the human resource development orientation of Ho Chi Minh City. VNU Ha Noi University of Education.
- Phung, D. P. (2014). Current status of vocational education for ninth graders in the Mekong Delta. Ho Chi Minh City University of Education – Journal of Science, 54, 112–118.
- Powers, S., & Myers, K. (2017). Vocational anticipatory socialization: College students' reports of encouraging/ discouraging sources and messages. *Journal of Career Development*, 44(5), 409–424.
- Schweri, J., Eymann, A., & Aepli, M. (2020). Horizontal mismatch and vocational education. Applied Economics, 1–15. https://doi.org/10.1080/00036846.2020.1713292
- Somers, M. A., Cabus, S. J., Groot, W., & van den Brink, H. M. (2019). Horizontal mismatch between employment and field of education: Evidence from a systematic literature review. *Journal of Economic Surveys*, 33(2), 567–603.
- Ulrich, A., Frey, A., & Ruppert, J. J. (2018). The role of parents in young people's career choices in Germany. *Psychology*, 9(08), 2194.
- Tran, T. T. (2012). Graduate employability: Interpretation versus expectation. Paper presented at *the Higher Education Research and Development Society of Australasia (HERDSA) Conference*, Hobart, Tas., Australia.
- Tran, Q. T., & Swierczek, F. W. (2009). Skills development in higher education in Vietnam. *Asia Pacific Business Review*, 15(4), 565–586.
- Tran, L., Marginson, S., Do, H., Le, T., Nguyen, N., Vu, T., & Pham, T. (2014). Higher education in Vietnam: Flexibility, mobility and practicality in the global knowledge economy. Springer.
- UNESCO. (2018). Work-based learning programmes for young people in the Arab region: A comparative and longitudinal analysis A synthesis report. Retrieved from https://unevoc.unesco.org/pub/yem_regional_overview_work_based_learning.pdf. Accessed 1 July 2021.
- UNESCO-UNEVOC. (2018). Short summary of the Virtual Conference on improving the image of TVET: Making TVET attractive to youth. https://vocationsandlearning.files.wordpress.com/2019/10/vc_synthesis_21_final.pdf. Accessed 1 July 2021.

Chapter 12 **Enhancing the Standing of VET** in Switzerland



Barbara E. Stalder and Fabienne Liithi

Abstract Compared to other countries, the Swiss vocational education and training (VET) system enjoys a high reputation. The VET system is reformed continuously, including regular revisions of VET programmes and the establishment of VET pathways from initial VET (IVET) to higher vocational or academic education. Both are essential means to strengthen the standing of VET pathways. This chapter addresses two challenges linked to these issues: (1) The quality of apprenticeships and concerns about how to secure high learning opportunities in workplaces and vocational schools; and (2) The career development opportunities of IVET graduates, which seem limited and might discourage high performing school leavers from choosing an IVET programme at the upper secondary level rather than enrolling in general education (gymnasium). Based on a situational resources approach and two surveys, we examine core elements of quality apprenticeships, including task-related (e.g., learning opportunities, autonomy) and social characteristics (e.g., instruction quality) of workplaces and vocational schools. We identify situational resource profiles and explore apprentices' attitudes towards their pathways and occupations (study 1) and compare the jobs and careers of IVET graduates without higher education degrees with those of IVET graduates who had also achieved a higher education degree and graduates from university (study 2). Drawing on the findings, we advance some propositions on how to ensure that the standing of VET remains high and VET pathways attractive. We conclude by emphasising that workplaces should offer possibilities for learning, personal growth, and positive career development to all employees - independent of their level of qualifications.

Keywords Vocational education and training · Apprenticeship · VET quality · Learning opportunities · Situational resources · Career development · Job satisfaction · Occupational commitment · Career success · Switzerland

B. E. Stalder (⋈) · F. Lüthi

Bern University of Teacher Education, Bern, Switzerland

e-mail: barbara.stalder@phbern.ch

247

The Standing of Vocational Education and Training in Switzerland

Following established criteria that measure the standing of vocational education and training (VET), such as enrolment rates, the prestige, or the involvement of private partners (see, e.g., Virolainen & Stenström, 2014), Switzerland's VET system has a high standing. It is well established, praised for its high quality, and reformed continuously to meet the needs of all VET actors (Dubs, 2006). Initial vocational education and training (IVET) programmes, which are mainly organised in the form of apprenticeships at the upper secondary level, are offered in more than 200 occupations. They are seen as the optimal way to foster the development of vocational competencies, to secure smooth school-to-work transitions, and to promote IVET graduates' further education and training (Bonoli et al., 2018; Cedefop, 2018; Elfering et al., 2007). Participation in IVET programmes has remained at a high rate over the years, with about 70% of school-leavers enrolling in such programmes (SERI, 2019), and only about 22% acquire a general education (gymnasium) certificate.

However, measuring the standing of VET by enrolment numbers alone might be misleading. First, although the apprenticeship system is highly credited within and beyond the country, vocational pathways have a lower prestige than universitybased pathways (Cattaneo & Wolter, 2016). Even if IVET also attracts highly skilled school leavers, an increasing number of academically stronger young people aspire to enter a gymnasium (GFS.Bern, 2019), leaving VET to young people with less favourable educational, cultural, and social backgrounds (Meyer, 2018). Second, young people's decisions to start a vocational, rather than a general education, programme is in many cases not a free choice. In most Swiss cantons, lower secondary education is structured in different tracks (e.g., streams with basic vs extended academic requirements), and students in a track with lower academic demands are rarely admitted to a gymnasium (Meyer, 2018). Third, the quality of training, teaching and learning in apprenticeships is often of mixed quality (Berger et al., 2020). Learning environments vary considerably between workplaces, schools, occupations, and employers (Filliettaz, 2013). The number of early contract cancelations in apprenticeship persists at 21% on average, reaching 30% in fields like hospitality and catering, or hairdressing (Bundesamt für Statistik, 2019). Fourth, an increasing number of IVET graduates continue their education at the tertiary level and acquire a higher education degree (FSO, 2018). The option that all IVET graduates can pursue more advanced education and training programmes is a particular strength of the Swiss VET system and might be a key factor in maintaining the high standing of VET and the attractiveness of VET pathways (SERI, 2019). At the same time, it might endanger the relative status of IVET qualifications (Hippach-Schneider et al., 2013; Virolainen & Stenström, 2014). It is feared that IVET learners without higher education end up in poorly paid and less prestigious jobs with limited opportunities for career advancement (Cedefop, 2018).

Following these considerations, we address the standing of VET by exploring it from two different perspectives. The first focuses on quality, which we investigate by looking at apprentices' situational learning resources in the workplace and vocational school and their attitudes towards their pathway and occupation. We argue that conducive and well-coordinated learning environments in workplaces and schools play a key role in strengthening the standing of VET. Such learning environments are not only crucial for apprentices' competence development but also have an effect on how apprentices perceive their pathway and the occupation they learn, and how they talk about their experiences with their parents, former teachers and young people who yet have to choose a post-compulsory pathway. Apprentices and former apprentices are important sources of information and may help promote VET as a worthwhile career option. Concerning quality and apprentices' perception of the apprenticeship, two questions guide our research: Do apprentices perceive their learning environments as conducive to learning and school and workplace as aligned? And how are apprentices' situational learning resources linked to their satisfaction, occupational commitment, and retrospective evaluation of the apprenticeship?

The second perspective focuses on careers and investigates the situational job resources and the career success of former IVET learners. We posit that the standing of VET pathways increases if IVET programmes offer rewarding, meaningful and secure jobs after graduation and career opportunities that are equally promising than those of graduates from higher education holding a university or higher vocational education degree. The related research questions are: What kind of jobs and careers are open to IVET graduates without higher education degree? How do they compare with those of IVET graduates who have also obtained a higher education qualification and graduates from general education with a university degree?

We address these questions using two studies with apprentices and IVET graduates and based on research from conservation of resources (COR) theory (Hobfoll et al., 2018). COR theory posits that individuals are motivated to obtain, preserve, and protect things they value highly and that a loss of personal or social resources impairs their life quality. A central principle of COR theory is that resources come 'in packs', and that gains (losses) of resources may lead to gain (loss) spirals. Those who have more resources will be more likely to gain even more resources; those with fewer resources are more at risk to lose resources. In the context of our research, this means, for example, that apprentices with high (wide ranging) learning resources in the workplace are more likely to also have similar levels of resources in vocational school, or that learners who do not continue their education after IVET might become increasingly disadvantaged in their career over time. COR theory thus advances an integrative understanding of apprentices' learning environments and career opportunities and helps evaluate the standing of VET from a broader perspective.

Quality Apprenticeships: Situational Resources in the Workplace and Vocational School

Quality apprenticeships provide the apprentices with high situational learning resources in the workplaces and at vocational schools (Stalder & Carigiet Reinhard, 2014). Situational resources foster effective learning, help individuals deal with challenges and demands, and provide the means to reach educational and work goals (Demerouti et al., 2001). VET research has shown that resources at the level of the task (e.g., ample learning opportunities), the teacher or trainer (e.g., highquality instructions), or classmates and coworkers (e.g., high social support) play a key role in the development of vocational competencies (Aarkrog, 2005; Akkerman, 2012; Mikkonen et al., 2017; Nisula & Metso, 2019). Regarding apprenticeships, in line with COR theory, studies also suggest that resources afforded within a certain learning location are related (Lüthi et al., 2021). It has been shown, for example, that learners who experience their work tasks as meaningful also perceive their workplace trainers as highly competent and supportive (Hofmann et al., 2014; Stalder & Lüthi, 2018), or that those with complex tasks have often also more responsibilities and autonomy (Reegård, 2015). What is less clear and often seen as a challenge in apprenticeships is the alignment of resources across workplaces and schools (Aarkrog, 2005; Akkerman, 2012). In some cases, workplaces and schools seem to be well connected. In others, learners consider them as separate learning environments who have little to do with each other, and workplace learning appears to be more relevant than learning at school (Lüthi et al., 2021; Rintala & Nokelainen, 2019). This perception runs counter to the expection of VET stakeholders that both the workplace and vocational school should be valid places of learning and might endanger apprentices' competence development and learning outcomes.

Apprentices' Attitudes Towards Their Pathway and Occupation

A number of researchers have highlighted that learners provided with high situational resources do not only learn faster and better, but also evaluate their learning environments more positively (Kälin et al., 2014; Reegård, 2015). Apprentices with ample opportunities for learning, meaningful tasks, and those who feel supported and appreciated as members of the team are more satisfied with their apprenticeship (Kälin et al., 2000; Messmann & Mulder, 2015), more committed to their organisation and occupation (Haasler, 2007), and less inclined to quit their apprenticeship (Powers & Watt, 2021). While most research with apprentices has focused on the relation between workplace conditions and apprentices' evaluation of their training, the role of schools is less clear. How do situational resources provided by VET teachers and schools affect apprentices' satisfaction, and their commitment towards the occupation they learn? Some researchers have suggested

that resources at vocational schools seem to influence learners' general attitudes towards their apprenticeships only a little (Stalder & Carigiet Reinhard, 2014). Another possibility could be, that workplace and school resources accumulate and might compensate for a lack of resources in either learning location. In general, it can be assumed that apprentices would be most satisfied if they have high resources in the workplace and school. If the assumption about compensatory effects holds true, satisfaction and commitment levels would be similarly high, if either of the learning locations provided high resources.

Quality Jobs: Situational Resources of Graduates

Gaining high job resources is especially important in the early career phase when individuals must establish themselves as skilled workers (Truxillo et al., 2012). It is therefore essential that young workers can engage in a variety of activities and challenging tasks, that they are welcomed as valued members of the organisation and supported in achieving their career goals (Kälin et al., 2014; Keller & Semmer, 2013). There is evidence that job demands, but also resources such as job autonomy and appreciation at work increase after the apprenticeship (Kälin et al., 2014; Keller & Semmer, 2013). IVET graduates with higher educational levels or more positive self-evaluations seem to be more likely to have jobs with high resources (Keller et al., 2016). In addition, research has shown that jobs requiring higher education levels provided better development opportunities (Holman, 2013), and that employees with demanding jobs participated more often in formal and informal learning (Kyndt & Baert, 2013). Graduates who do not obtain a higher education degree in addition to their IVET diploma might thus be doubly disadvantaged. First, because their job might have a low potential for informal learning, which could be increasingly the case after a couple of years in the same occupation and with the same employer; Second, because their job or employer might neither provide support or incentives to engage in further education nor the opportunities for career advancement within the organisation.

Graduates' Attitudes Towards Their Pathway and Occupation

Working conditions are strongly related to employees' job-related attitudes, their career evaluation, and their well-being and health (Humphrey et al., 2007; Spurk et al., 2018). Jobs with high situational resources, such as high job control, and good social relations with colleagues or supervisors support young workers' task mastery, social integration, and feelings of achievement and advancement (Elfering et al., 2007; Shockley et al., 2016). In general, higher job resources go along with higher job and career satisfaction, and higher occupational and organisational commitment (Ng & Feldman, 2014). In addition to job resources, research has shown that career

252 B. E. Stalder and F. Lüthi

outcomes depend on personal factors and individual resources, such as age, gender, social background, motivation, and career management strategies (Ng & Feldman, 2014; Stalder & Lüthi, 2020). Regarding education and skill-related hurdles, the evidence is mixed. It seems that the level of education is more strongly linked to objective career success (e.g., salary, position, promotions), but only weakly to subjective success (e.g., job and career satisfaction) (Ng & Feldman, 2014). Studies comparing IVET graduates' job or career satisfaction with that of general education graduates are missing. Regarding apprentices, Kälin et al. (2014) found that graduates from different occupations did not differ in their job satisfaction some years later. Overall, job satisfaction and resigned attitude towards one's job remained stable in the first years after graduation. However, they increased for workers who had changed the occupation.

Survey with Apprentices and Graduates

To address the standing of VET from the perspective of situational resources and learners' attitudes towards their pathway and occupation, a situational resource perspective during and after IVET, we report and elaborate findings from two studies: (a) a survey with apprentices which explored situational (learning) resource profiles, apprenticeship satisfaction and occupational commitment (Lüthi et al., 2021), and (b) a survey with graduates that compared situational (job) resources and career outcomes of former IVET-learners without higher education degree with those of IVET graduates who had also obtained a higher education qualification and graduates from gymnasium who had completed university-based higher education (Stalder & Lüthi, 2020). Both studies were based on data from the Swiss youth panel study Transition from Education to Employment¹ (TREE, 2016), which explores the post-compulsory educational and labour market pathways of more than 6000 school-leavers in Switzerland.

The survey with apprentices included 1185 learners (44% female), who were in their second year of training in 2002 or 2003 (Lüthi et al., 2021). Apprentices had a mean age of 18.1 years (SD=.65). Half of them (48%) were in apprenticeships with high intellectual demands (e.g., commercial employee, IT technician), whereas 31% were in apprenticeships with medium intellectual demands (e.g., electrical fitter, dental assistant) and 21% in such with lower intellectual demands (e.g., retail sales assistant, painter). Situational resources in the workplace and at the vocational school were assessed with five indicators each (TREE, 2016): (1) Learning opportunities (three items each, e.g., "In the workplace/at school I can always learn something new", Likert-type answer scale from $1 = hardly \ ever$ to $5 = very \ often$), (2) Autonomy (three items each, e.g., "I take part in the decision-making about

¹The Swiss panel study TREE is a social science data infrastructure mainly funded by the Swiss National Science Foundation (SNF) and located at the University of Berne. Website: https://www.tree.unibe.ch/index_eng.html

which tasks I have to do", scale from 1 = strongly disagree to 5 = strongly agree), (3) Instruction quality (five items each, e.g., "If I ask a question, my vocational trainer has time to explain it", scale from 1 = not at all true to 4 = exactly true), (4) Learning climate (workplace: three items; school: two items, e.g., "My company/ school is a place where I like to be", scale from 1 = not at all true to 4 = exactlytrue), and (5) demands (five items each, e.g., "I must do tasks that are too complicated for me" and "I have too much to do", scale from 1 = all the time to 5 = never). Apprenticeship satisfaction (three items, e.g., "How satisfied are you in general with your apprenticeship?") and VET-related resignation (three items, e.g., "As an apprentice one cannot expect much") were both measured on a 7-point scale from 1 = extremely dissatisfied to 7 = extremely satisfied (and inversed) (Bruggemann et al., 1975). Occupational commitment included three items (e.g., "I am proud of the occupation, I'm trained in", scale from 1 = not at all true to 4 = exactly true (TREE, 2016). A retrospective evaluation of the apprenticeship was assessed 1 to 2 years after graduation by graduates who were employed. They indicated if they could use what they have learned in the company and in vocational school in their current job, and if they would choose the occupation they were trained in and their company again (scale from 1 = not at all true to 4 = exactly true, TREE, 2016).

The graduate survey included 1507 persons (56% female) who had successfully finished an IVET or general education (gymnasium) programme and worked for at least 8 hours per week in 2014. Most of them (83%) had finished their upper secondary vocational or general education in the years 2003 or 2004. The mean age in 2014 was 29.5 years (SD = 0.61). Graduates were sorted into three groups: (1) IVET graduates without a higher education degree until 2014 (N = 585), (2) IVET graduates with a higher education degree (N = 395), and (3) graduates from general education (gymnasium) with a university degree (N = 527). Job resources were assessed in 2014 by four indicators, which were similar to the apprentices' survey (Prümper et al., 1995; TREE, 2016). They included (1) Learning opportunities (three items, similar to apprentices' survey); (2) Autonomy (three items, similar to apprentices' survey); (3) Social relations (four items, e.g., "I have a good relationship with my supervisor", response scale from 1 = not at all true to 4 = exactly true, TREE, 2016); and (4) Further training opportunities (one item, "My company offers good further training opportunities", response scale from 1 = not at all true to 4 = exactly true, Prümper et al., 1995). Career success was assessed by career satisfaction and job satisfaction in 2014. Career satisfaction was measured with four items following Greenhaus et al. (1990) on a 5-point scale (1 = strongly disagree; 5 = strongly agree) (e.g., "I am satisfied with the success I have achieved in my career"). Job satisfaction was assessed with three items that were parallel to those used in the apprentices' survey. We also assessed occupational commitment with five items following Meyer et al. (1993) (e.g., "I'm proud to work in this occupation", scale from 1 = strongly disagree to <math>5 = strongly agree) (Table 12.1).

We present the findings in four sections. The first two are based on the survey with apprentices and explore their situational resources, satisfaction, and commitment. The latter two include results from the graduate study and report

Table 12.1 Concepts in the two studies

			Study 1: Apprentices	Study 2: Graduates
	Measurement	Context	Number of items	Number of items
Situational resource	s			
Learning	1 = hardly ever to 5 = very	Workplace	3	3
opportunities	often	School	3	
Autonomy	1 = strongly disagree to	Workplace	3	3
	5 = strongly agree	School	3	
Instruction quality	1 = not at all true to	Workplace	5	
	4 = exactly true	School	5	
Learning climate	1 = not at all true to	Workplace	3	
	4 = exactly true	School	2	
Demands	1 = all the time to $5 = $ never	Workplace	5	
		School	5	
Social relations	1 = not at all true to 4 = exactly true			4
Further training opportunities	1 = not at all true to 4 = exactly true			1
Attitudes towards pa	thway and occupation			
Satisfaction	1 = extremely dissatisfied to 7 = extremely satisfied		3	3
Resignation (rev)	1 = extremely dissatisfied to 7 = extremely satisfied		3	
Occupational commitment	1 = not at all true to 4 = exactly true (study 1)		3	5
	1 = strongly disagree to 5 = strongly agree (study 2)			
Retrospective evaluation	1 = not at all true to 4 = exactly true		4	
Career satisfaction	1 = strongly disagree to 5 = strongly agree			4

findings of the situational (job) resources, graduates' job and career satisfaction and their occupational commitment.

Apprentices' Situational Resources

To explore the quality of education and training, second-year apprentices evaluated their situational resources in the workplace and vocational school. In general, apprentices' ratings were positive. Comparing workplace and vocational school, they appraised the workplace resources more favourably than those from school. Work tasks included more possibilities for learning than school tasks, and the

instruction quality of workplace trainers seemed to be better than those of VET teachers. In addition, autonomy in the workplace was higher; that is, learners had more possibilities to decide what and how they do their work tasks than those at school. The learning climate in the company and the class was similar and favourable for both learning locations. Demands seemed to be adapted to learners' capabilities and skills both in the workplace and vocational school. In the workplace, quantitative demands (time, speed, amount of work to do) were at an average and qualitative demands (complexity, having to learn too difficult things) at a lower level. Demands at vocational school (difficulty, speed, homework) seemed to be low to average.

Latent profile analysis (LPA) were run to find out whether situational resources can be described in distinct patterns (for details see Lüthi et al., 2021). We found four resource profiles: (A) high resources (N = 522), (B) average resources (N = 448), (C) high work—low school resources (N = 158), and (D) low work—average school resources (N = 57). Results of the LPA are illustrated in Fig. 12.1. In general, the four profiles differed with respect to the overall level of resources and to specific

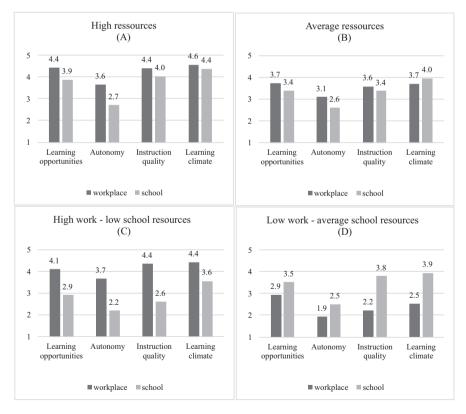


Fig. 12.1 Apprentices' situational resource profiles. (*Note*. Means of situational resources in the workplace and at school. Demands are not depicted as they did not show variations across profiles and were generally low to average)

resource levels in both learning locations. Resources varied more strongly in the workplace than in vocational school.

Profile A was marked by overall favourable learning environments: Trainers and teachers supported apprentices highly, and learners had numerous opportunities to expand their knowledge and skills. Learning took place in a conducive climate, and apprentices had ample possibilities to decide autonomously on how and when to accomplish their tasks in the workplace and school. Profile B was characterised by moderate autonomy at the workplace and learning opportunities and an instruction quality and climate a bit above the mid-level at both learning venues. In Profile C, high resources were available in the workplace, whereas resources at school seemed to be limited. Apprentices considered the instruction quality of their teachers as rather low, meaning, for example, that the teachers seemed less competent in explaining school matters. Learners in Profile D judged their resources in the workplace and especially the organisational climate and the quality of their trainers' instruction as very low compared to all other profiles.

Referring to the concern of a potential lack of alignment between workplaces and schools, our results indicate that this is not the case for most learners. In the two largest Profiles A and B, with more than 80% of learner respondents, the situational resources were similarly high across both learning locations. This suggests that most of the learners perceived their workplace and school as equally conducive for learning—at both the level of the tasks that provide opportunities for learning and the social level, including supportive educators and colleagues and a favourable learning climate. Resources in Profiles C and D were more misaligned, displaying contrasting levels of resources in each learning location. These profiles covered smaller groups of apprentices and were characterized by restricted learning environments in vocational schools (C) and workplaces (D). Note that the size of the two less favourable profiles might be underestimated, as they only include secondyear apprentices. As apprenticeship dropout happens most often in the first year of the apprenticeship, learners with more critical views about their learning conditions may well have dropped out before the survey (Bundesamt für Statistik, 2019).

In general, learners in Profiles A and B seemed able to secure adequate (high) resources in both learning locations, resulting in a good fit to both the workplace and school (Hobfoll et al., 2018; Jansen & Kristof-Brown, 2006). Apprentices in Profile C seemed to fit well to the learning environment in the workplace but less to school. This might concern a group of apprentices who are highly engaged in practice-based learning but have limited motivation to learn at school (Mulder et al., 2015). In Profile D, the company's learning conditions appear not to correspond to learners' interests and needs. This group of learners may have been poorly integrated or had to do tasks that lack challenge and meaning (Mulder et al., 2015).

Apprentices' Attitudes Towards Their Pathway and Occupation

Apprentices were asked to indicate how satisfied they were with the apprenticeship, how committed they were towards their occupation, and whether they had feelings of resignation about their apprenticeship. Additionally, 1 to 2 years after graduation, those who were employed specified if they could use in their current job what they have learned and if they would choose this apprenticeship again. We used analyses of variance to test whether apprentices in the four profiles differed in their evaluation.

Learners in the four profiles varied strongly in their apprenticeship satisfaction and occupational commitment (Table 12.2). Satisfaction and commitment were the highest among learners in Profile A (high resources) and rather high in Profile C (high work-low school resources), followed by the profile with overall average resources (Profile B). Individuals in Profile D with low work and average school resources were the least satisfied and committed. Levels of IVET-related resignation differed in a similar manner, being lowest in profiles with higher workplace resources (A and C) and highest in Profile D.

The evaluation of apprenticeship after graduation (Table 12.3 and Fig. 12.2) indicated similar tendencies as the evaluation during IVET. Former apprentices in profiles with high resources (A) reported more often than learners from other groups that they could use in their current job what they have learned during their apprenticeship. Similarly, they more often stated that they would choose the same occupation and company again. Those with profile D were the most critical in their evaluation. Looking back at their apprenticeship, many of them stated that they would not do the same apprenticeship in the same occupation, and especially not in the same company again.

In general, apprentices' evaluation of the apprenticeship during IVET and after graduation were similar across profiles. Learners in profiles with high resources at

		A	В	С	D		
		high resources	average resources	high work-low school resources	low work- average school resources	F	Sig.
Apprenticeship	Mean	5.12	4.04	4.56	2.95	172.53	<.001
satisfaction	SD	0.92	0.86	0.97	1.01		
Occupational	Mean	3.51	3.03	3.39	2.71	95.93	<.001
commitment	SD	0.46	0.55	0.49	0.69		
VET-related resignation	Mean	2.51	3.41	2.75	4.23	84.91	<.001
	SD	0.99	1.14	1.15	1.20		

Table 12.2 Apprenticeship satisfaction and occupational commitment by profile

Note. Satisfaction and resignation: 7-point scale. Commitment: 4-point scale. The four profiles differed significantly in all three outcomes (post-hoc tests)

		A	В	С	D		
		high resources	average resources	high work-low school resources	low work- average school resources	F	Sig.
What I learned in	Mean	3.17	2.81	2.66	2.85	12.96	<.001
VET school is useful for my job.	SD	0.83	0.83	0.86	0.83		
What I learned in	Mean	3.53	3.18	3.38	2.82	12.61	<.001
the company is useful for my job.	SD	0.74	0.86	0.83	1.01		
I would choose	Mean	3.38	2.97	3.02	2.94	10.44	<.001
this occupation again.	SD	0.82	0.94	0.97	1.15		
I would choose	Mean	3.41	2.70	3.43	2.09	39.81	<.001
this company again.	SD	0.87	1.07	0.83	1.23		

Table 12.3 Evaluation of apprenticeship by profile (after graduation)

Note. All items: 4-point scale

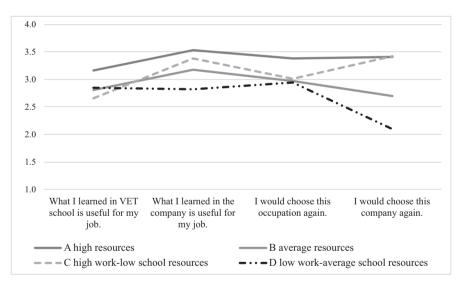


Fig. 12.2 Evaluation of apprenticeship by profile (after graduation)

both learning locations were not only the most satisfied and committed and the least likely to resign during the apprenticeship but also the most positive in their retrospective evaluation. Interestingly, former apprentices in Profiles C—with high resources in the workplace but low resources in school—evaluated their apprenticeships better than apprentices in profiles B (average resources). Overall, our results show that workplace resources play a key role in educational success during apprenticeships and seem to affect later subjective evaluations more than

school-based resources do (Hofmann et al., 2014; Stalder & Carigiet Reinhard, 2014). A possible explanation might be that apprentices identify more strongly with their role as young workers in training (Rintala & Nokelainen, 2019) rather than as students at school. They spend more time in the workplace than in school and might feel a stronger bonding to the workplace (Reegård, 2015).

Quality Jobs: Situational Resources After Graduation

To explore the quality of jobs, graduates evaluated their situational resources in the workplace. We used analyses of variance to test whether IVET graduates with and without higher education degrees and graduates from general education programmes (gymnasium) with a university degree differed in their perceptions (Table 12.4). We were particularly interested to find out whether IVET graduates without higher education (IVET) were in less favourable job situations than graduates with a higher degree (IVET and higher education; gymnasium and higher education) (Holman, 2013; Kyndt & Baert, 2013). Our results support the concern partly.

The jobs of IVET graduates without a higher degree were characterised by fewer learning and further training opportunities than those of graduates with a higher education degree. In addition, IVET graduates without a higher degree had lower autonomy in their job than better-educated IVET learners. Interestingly, the jobs of IVET graduates with higher education did not differ to a great extent from those of university graduates (i.e., students who had completed the gymnasium and a university-based higher education). Their jobs included similar levels of learning and further training opportunities and even more autonomy than those with a general education/university pathway. Regarding social relations, the three groups did not differ significantly, which suggests that IVET graduates are equally well accepted as valuable team members than those with a higher degree (Kälin et al., 2014).

			IVET and higher	Gymnasium and		
		IVET	education	higher education	F(df = 2)	Sig.
Learning	Mean	3.80	4.02	4.06	21.09	<.001
opportunities	SD	0.78	0.64	0.72		
Autonomy	Mean	3.86	4.00	3.83	5.11	.006
	SD	0.88	0.70	0.82		
Social relations	Mean	3.20	3.28	3.27	2.85	.058
	SD	0.54	0.49	0.55		
Further training opportunities	Mean	2.65	2.91	2.81	10.00	<.001
	SD	0.89	0.85	0.89		

Note. Learning opportunities and autonomy: 5-point scale. Social relations and further training opportunities: 4-point scale

Graduates' Attitudes Towards Their Pathway and Occupation

Analyses of variance were run to test whether IVET graduates without higher education degrees, IVET graduates with higher education degrees and graduates of general education with university degrees think differently about their job and career (Table 12.5).

Regarding job satisfaction, the three groups did not differ significantly, which is in line with previous research (Ng & Feldman, 2014). In contrast, the three groups varied in their career satisfaction and occupational commitment. IVET graduates, who had also obtained a higher education degree, were the most positive about their career. They were more satisfied than IVET graduates without higher education degrees and graduates from general education with a university degree. In addition, they were more committed to their occupation than IVET graduates without higher education. Overall, the results partly confirm the concern that IVET graduates, who do not continue their education at the tertiary level, might be disadvantaged in their careers (Cedefop, 2018). Although they seem to be equally satisfied with their job as the better-educated graduates, they might have the impression that they have not achieved as much as others and do not feel the same pride in and bonding to their occupation as those with higher education degrees.

Previous research has highlighted that factors like tenure, advancement and job changes influence the way people think about their career (Ng & Feldman, 2014). This might also be the case in this study. IVET graduates without higher education had been in their current jobs for a longer time (M = 4.1 years, SD = 0.97) than those with a higher degree after graduating from the IVET programme (M = 3.1 years, SD = 2.36), and graduates with a general education/university pathway (M = 2.0 years, SD = 1.61). In the 7 years prior to the survey, more than a third of the former IVET learners had changed their occupation (35.6%), and most of them had moved to another employer (78.3%). The latter situation is particularly the case for those who had obtained a higher degree (85.5%). Moving to another job and employer may have contributed to a more positive evaluation of their career progress.

			IVET and higher	Gymnasium and		
		IVET	education	higher education	F(df = 2)	Sig.
Career satisfaction	Mean	3.60	3.85	3.68	13.59	<.001
	SD	0.78	0.65	0.78		
Job satisfaction	Mean	4.73	4.83	4.72	1.27	.280
	SD	1.16	1.03	1.14		
Occupational commitment	Mean	5.66	5.84	5.80	4.43	.012
	SD	1.13	0.91	1.02		

Table 12.5 Graduates' satisfaction and occupational commitment

Note. Career satisfaction: 5-point scale. Job satisfaction and occupational commitment: 7-point scale

Finally, we explored whether the situational resources of apprentices influenced their later career outcomes. Results show that learners who had the most beneficial learning conditions (Profile A) during apprenticeship also evaluated their career more positively than other learners. Ten years after their graduation from IVET, they were significantly more satisfied with their job than those from other profiles (Mean(SD): Profile A = 5.0(0.93), Profile B = 4.7(1.12), Profile C = 4.7(1.08), Profile D = 4.8(1.15)), and also more satisfied with their career (Mean(SD): Profile A = 3.9(0.64), Profile B = 3.6(0.73), Profile C = 3.7(0.80), Profile D = 3.7(0.76)). Similarly, former learners from Profile A were more committed to their current occupation (Mean(SD)): Profile A = 5.9(0.86), Profile B = 5.6(1.04), Profile C = 5.7(0.93), Profile D = 5.5(1.03)).

Conclusion

The Swiss VET system is praised for its high quality and a high standing within and outside the country. Apprenticeships, which are a core element of VET in Switzerland, are recognised as valid career pathways, providing IVET graduates with smooth school-to-work transitions, meaningful work, and opportunities into tertiary-level and further education (Bonoli et al., 2018). We argued in this chapter that workplaces and schools which are conducive to learning and well-coordinated play a key role in strengthening the standing of VET. Such learning environments are crucial for apprentices' competence development and meet the need for a well-qualified and in-demand workforce in the labour market. In addition, favourable learning environments positively affect apprentices' perception of their pathway and the occupation they learn. Apprentices and former apprentices are an important source of information for parents, teachers, and younger people and may help promote VET as a worthwhile career option.

The results presented in this chapter corroborate, first, the strengths of the apprenticeships system. Both the workplace and vocational school are valid learning contexts for most apprentices, and after graduation, most of them can effectively use in their current job what they have learned during IVET. Whereas curricular approaches emphasise the importance of school-related learning in apprenticeship, apprentices appreciate learning in the workplace to a greater extent. The resources provided by companies and the kind of learning conditions they offer seem to be the key for vocational learning and apprentices' positive attitudes towards their pathway. Workplaces influence apprentices' satisfaction and commitment to a greater extent than do schools.

In today's complex and fast-changing world, formal, non-formal and informal learning has become vital for an individuals' positive career development (Sessa & London, 2006). Organisations need to support, facilitate, and foster continuous learning and development of their staff; individuals need to recognise and seize opportunities for learning. The concept of different educational pathways leading to equally rewarding job outcomes is seen as a particular strength of the Swiss VET

system (SERI, 2019). However, as higher education qualifications become common, concern has grown that IVET graduates without tertiary level-degree might be pushed into lower-quality jobs and careers with limited opportunities to learn and advance. Our results partly support these concerns. To maintain the high standing of VET, the quality of apprenticeship must be ensured, access to higher and further education and training must be facilitated, and workplaces should offer possibilities for learning, personal growth, and positive career development to all employees—independent of their level of qualifications.

References

- Aarkrog, V. (2005). Learning in the workplace and the significance of school-based education: A study of learning in a Danish vocational education and training programme. *International Journal of Lifelong Education*, 24(2), 137–147. https://doi.org/10.1080/02601370500056268
- Akkerman, S. F. B., & Arthur. (2012). Crossing boundaries between school and work during apprenticeships. *Vocations and Learning*, 5, 153–173. https://doi.org/10.1007/s12186-011-9073-6
- Berger, J.-L., Wenger, M., & Sauli, F. (2020). La qualité de la formation professionnelle duale en Suisse. *Education Permanente*, 223(2), 91–100.
- Bonoli, L., Berger, J.-L., & Lamamra, N. (Eds.). (2018). *Enjeux de la formation professionnelle en Suisse. Le «modèle» suisse sous la loupe*. Seismo.
- Bruggemann, A., Groskurth, P., & Ulich, E. (1975). Arbeitszufriedenheit. Hans Huber.
- Bundesamt für Statistik. (2019). Lehrvertragsauflösung, Wiedereinstieg, Zertifikationsstatus. Resultate zur dualen beruflichen Grundbildung (EBA und EFZ), Ausgabe 2019. Bundesamt für Statistik. https://www.swissstats.bfs.admin.ch/collection/ch.admin.bfs. swissstat.de.issue191516411900/article/issue191516411900-01
- Cattaneo, M. A., & Wolter, S. C. (2016). Die Berufsbildung in der Pole-Position. Die Einstellungen der Schweizer Bevölkerung zum Thema Allgemeinbildung vs. Berufsbildung. SKBF Staff Paper 18. Schweizerische Koordinationstelle für Bildungsforschung.
- Cedefop. (2018). The changing nature and role of vocational education and training in Europe. Volume 5: Education and labour market outcomes for graduates from different types of VET system in Europe (Research Paper No. 69). Publications Office of the European Union. https://doi.org/10.2801/730919
- Demerouti, E., Bakker, A. B., Nachreiner, F., & Schaufeli, W. B. (2001). The job demands-resources model of burnout. *Journal of Applied Psychology*, 86(3), 499–512. https://doi.org/10.1037/0021-9010.86.3.499
- Dubs, R. (2006). An appraisal of the Swiss vocational education and training system. hep.
- Elfering, A., Semmer, N. K., Tschan, F., Kälin, W., & Bucher, A. (2007). First years in job: A three-wave analysis of work experience. *Journal of Vocational Behavior*, 70(1), 97–115. https://doi.org/10.1016/j.jvb.2006.07.001
- Filliettaz, L. (2013). Affording learning environments in workplace contexts: An interactional and multimodal perspective. *International Journal of Lifelong Education*, 32(1), 107–122. https://doi.org/10.1080/02601370.2012.734480
- FSO. (2018). Educational degrees and certificates: 2018 edition. Federal Statistical Office (FSO). https://www.swissstats.bfs.admin.ch/collection/ch.admin.bfs.swissstat.en. issue181516361800/article/issue181516361800-01
- GFS.Bern. (2019). Nahtstellenbarometer Welle 1/April 2019. Detaillierter Ergebnisbericht. Umfrage bei Jugendlichen und Unternehmen im Auftrag des Staatssekretariats für Bildung, Forschung und Innovation. GFS.Bern.

- Greenhaus, J. H., Parasuraman, S., & Wormley, W. M. (1990). Effects of race on organizational experiences, job performance evaluations, and career outcomes. *Academy of Management Journal*, 33(1), 64–86. https://doi.org/10.2307/256352
- Haasler, B. (2007). Apprentices' experiences of occupational and organisational commitment: An empirical investigation in a German automobile company. In A. Brown, S. Kirpal, & F. Rauner (Eds.), *Identities at work* (pp. 261–284). Springer. https://doi.org/10.1007/978-1-4020-4989-7_10
- Hippach-Schneider, U., Weigel, T., Brown, A., & Gonon, P. (2013). Are graduates preferred to those completing initial vocational education and training? Case studies on company recruitment strategies in Germany, England and Switzerland. *Journal of Vocational Education and Training*, 65(1), 1–17. https://doi.org/10.1080/13636820.2012.727856
- Hobfoll, S. E., Halbesleben, J., Neveu, J.-P., & Westman, M. (2018). Conservation of resources in the organizational context: The reality of resources and their consequences. *Annual Review* of Organizational Psychology and Organizational Behavior, 5(1), 103–128. https://doi. org/10.1146/annurev-orgpsych-032117-104640
- Hofmann, C., Stalder, B. E., Tschan, F., & Häfeli, K. (2014). Support from teachers and trainers in vocational education and training: The pathways to career aspirations and further career development. *International Journal for Research in Vocational Education and Training (IJRVET)*, *I*(1), 1–20. https://doi.org/10.13152/IJRVET.1.1.5
- Holman, D. (2013). Job types and job quality in Europe. Human Relations, 66(4), 475–502. https://doi.org/10.1177/0018726712456407
- Humphrey, S., Nahrgang, J., & Morgeson, F. (2007). Integrating motivational, social, and contextual work design features: A meta-analytic summary and theoretical extension of the work design literature. *Journal of Applied Psychology*, 92(5), 1332–1356. https://doi.org/10.1037/0021-9010.92.5.1332
- Jansen, K. J., & Kristof-Brown, A. (2006). Toward a multidimensional theory of personenvironment fit. *Journal of Managerial Issues*, 18(2), 193–212.
- Kälin, W., Semmer, N. K., Elfering, A., Tschan, F., Dauwalder, J.-P., Heunert, S., & Crettaz von Roten, F. (2000). Work characteristics and well-being of Swiss apprentices entering the labor market. *Swiss Journal of Psychology*, *59*(4), 272–290. https://doi.org/10.1024//1421-0185.59.4.272
- Kälin, W., Keller, A. C., Tschan, F., Elfering, A., & Semmer, N. K. (2014). Work experiences and well-being in the first years of professional work in Switzerland: A ten-year follow-up study. In A. C. Keller, R. Samuel, M. M. Bergman, & N. K. Semmer (Eds.), *Psychological, educational, and sociological perspectives on success and well-being in career development* (pp. 151–170). Springer.
- Keller, A. C., & Semmer, N. K. (2013). Changes in situational and dispositional factors as predictors of job satisfaction. *Journal of Vocational Behavior*, 83(1), 88–98. https://doi.org/10.1016/j.jvb.2013.03.004
- Keller, A. C., Stalder, B. E., Lgic, I., Semmer, N. K., & Elfering, A. (2016). Who gets the high quality jobs ten years after compulsory school? In K. Scharenberg, S. Hupka-Brunner, T. Meyer, & M. M. Bergman (Eds.), *Transitions in youth and young adulthood: Results from the Swiss TREE panel Study* (Vol. 2, pp. 231–251). Seismo.
- Kyndt, E., & Baert, H. (2013). Antecedents of employees' involvement in work-related learning: A systematic review. Review of Educational Research, 83(2), 273–313. https://doi.org/10.3102/0034654313478021
- Lüthi, F., Stalder, B. E., & Elferling, A. (2021). Apprentices' resources at work and school in Switzerland: A person-centred approach. *International Journal for Research in Vocational Education and Training*, 8(2), 224–250. https://doi.org/10.13152/ijrvet.8.2.5
- Messmann, G., & Mulder, R. H. (2015). Conditions for apprentices' learning activities at work. Journal of Vocational Education & Training, 67(4), 578–596. https://doi.org/10.1080/1363682 0.2015.1094745
- Meyer, T. (2018). Vers une sociographie des apprenti.e.s en Suisse: Réflexions a partir des données TREE. In L. Bonoli, J.-L. Berger, & N. Lamamra (Eds.), *Enjeux de la formation professionnelle en Suisse. Le «modèle» suisse sous la loupe* (pp. 129–155). Seismo.

- Meyer, J. P., Allen, N. J., & Smith, C. A. (1993). Commitment to organizations and occupations: Extension and test of a three-component conceptualization. *Journal of Applied Psychology*, 78(4), 538–551.
- Mikkonen, S., Pylväs, L., Rintala, H., Nokelainen, P., & Postareff, L. (2017). Guiding workplace learning in vocational education and training: A literature review. *Empirical Research in Vocational Education and Training*, 9(1). https://doi.org/10.1186/s40461-017-0053-4
- Mulder, R. H., Messmann, G., & König, C. (2015). Vocational education and training: Researching the relationship between school and work. *European Journal of Education*, 50(4), 497–512. https://doi.org/10.1111/ejed.12147
- Ng, T. W. H., & Feldman, D. C. (2014). Subjective career success: A meta-analytic review. *Journal of Vocational Behavior*, 85(2), 169–179. https://doi.org/10.1016/j.jvb.2014.06.001
- Nisula, A.-M., & Metso, S. (2019). Factors fostering vocational students' workplace learning success in the real workplace environment. *Journal of Education and Work*, 32(6-7), 552–569. https://doi.org/10.1080/13639080.2019.1673884
- Powers, T. E., & Watt, H. M. G. (2021). Understanding why apprentices consider dropping out: Longitudinal prediction of apprentices' workplace interest and anxiety. *Empirical Research in Vocational Education and Training*, 13(1). https://doi.org/10.1186/s40461-020-00106-8
- Prümper, J., Hartmannsgruber, K., & Frese, M. (1995). KFZA. Kurzfragebogen zur Arbeitsanalyse. Zeitschrift für Arbeits- und Organisationspsychologie, 39(3), 125–131.
- Reegård, K. (2015). Sales assistants in the making: Learning through responsibility. *Vocations and Learning*, 8(2), 117–133. https://doi.org/10.1007/s12186-015-9129-0
- Rintala, H., & Nokelainen, P. (2019). Vocational education and learners' experienced work-place curriculum. *Vocations and Learning*, 13(1), 113–130. https://doi.org/10.1007/s12186-019-09229-w
- SERI. (2019). Vocational and professional education and training in Switzerland: Facts and figures 2019. State Secretariat for Education, Research and Innovation (SERI).
- Sessa, V. I., & London, M. (2006). Continuous learning in organizations: Individual, group, and organizational perspectives. Lawrence Erlbaum Associates Publishers.
- Shockley, K. M., Ureksoy, H., Rodopman, O. B., Poteat, L. F., & Dullaghan, T. R. (2016). Development of a new scale to measure subjective career success: A mixed-methods study. *Journal of Organizational Behavior*, 37(1), 128–153. https://doi.org/10.1002/job.2046
- Spurk, D., Hirschi, A., & Dries, N. (2018). Antecedents and outcomes of objective versus subjective career success: Competing perspectives and future directions. *Journal of Management*. https://doi.org/10.1177/0149206318786563
- Stalder, B. E., & Carigiet Reinhard, T. (2014). Ausbildungsqualität aus Sicht von Lernenden und Betrieben in der Schweiz. In M. Fischer (Ed.), *Qualität in der Berufsausbildung Anspruch und Wirklichkeit* (pp. 97–118). Bertelsmann.
- Stalder, B. E., & Lüthi, F. (2018). Learning within and beyond the borders of schools and work-places. In L. Moreno Herrera, M. Teräs, & P. Gougoulakis (Eds.), *Vocational education & training The world of work and teacher education. Emerging issues in vocational education & training* (Vol. III, pp. 249–276). Premiss förlag.
- Stalder, B. E., & Lüthi, F. (2020). Job resources and career success of IVET graduates in Switzerland: A different approach to exploring the standing of VET. *Journal of Vocational Education & Training*, 72(2), 189–208. https://doi.org/10.1080/13636820.2020.1721735
- TREE. (2016). Documentation on the first TREE cohort (TREE1), 2000–2016. TREE.
- Truxillo, D. M., Cadiz, D. M., Rineer, J. R., Zaniboni, S., & Fraccaroli, F. (2012). A lifespan perspective on job design: Fitting the job and the worker to promote job satisfaction, engagement, and performance. *Organizational Psychology Review*, 2(4), 340–360. https://doi.org/10.1177/2041386612454043
- Virolainen, M., & Stenström, M.-L. (2014). Finnish vocational education and training in comparison: Strengths and weaknesses. *International Journal for Research in Vocational Education and Training*, 1(2), 81–106. https://doi.org/10.13152/IJRVET.1.2.1

Chapter 13 The Significance of Learning Environment and Decision-Making for Enrolment in and Completion of VET: A Danish Case



Vibe Aarkrog

Abstract Two challenges characterise and weigh heavily on Danish vocational education and training (VET). Too few young people enrol in VET directly after lower secondary education, and only around half of the students who enrol in a VET programme complete their studies. A reform of VET from 2014 proposed a set of initiatives to address these two challenges. However, studies have shown that, in general, these initiatives have not resulted in improvements in either enrolment or completion rates. This led to yet another reform of VET in 2018 that included an additional set of initiatives.

Based on accounts of the poor effects of the 2014 reform's initiatives and acknowledging that there is no simple solution to either the low intake or the high dropout, this chapter focuses on two factors that are particularly important for efforts to increase both enrolment and completion rates. These two factors are 'attractive learning environments' and 'students' decision-making skills, targeting three issues: (i) What constitutes an attractive VET learning environment for young people? (ii) What characterises VET students' decisions and decision-making process? and (iii) How are students' ability to make decisions and their perceptions of the training environment interrelated?

Keywords VET · Decision-making skills · Training and learning environment · Drop-out · Enrolment · Teacher competences · Guidance · Standing · Reforms · Youth education

Introduction: VET Does Not Seem to Be an Attractive Option

The Danish VET system is characterised by the same challenges that are recorded in the other chapters of this monograph, as well as in a special issue of the Journal of Vocational Education & Training (Billett, 2020).

VET is not seen as an attractive option by young people, reflected both in low enrolment and high dropout. In 2000, approximately a third of a Danish youth cohort enrolled in VET directly after completing lower secondary education (Year 9 or Year 10); today, the figure is approximately a fifth (19% in 2021) (UVM, 2021). Furthermore, only around half of the students enrolling in a VET programme complete their studies within 5 years (Danmarks Statistik, 2021).

Showing that the initiatives included in two recent Danish VET reforms do not seem to improve either enrolment or completion rates and acknowledging that there is no simple solution to the challenges, the chapter proposes two factors as particularly important for enhancing the status of VET. Based on the results of recent research on Danish VET, students' perceptions of the training environment and their ability for decision-making should be taken into consideration when developing policies and initiatives to address the seemingly persistent challenges facing Danish VET. This research also suggests that teachers are a strong pull factor in terms of students' completion of a VET programme, with the teacher playing a central role in providing an attractive training environment and in developing their students' decision-making skills.

The chapter is structured as follows: based on an overview of the initiatives in two recent reforms from 2014 and 2018 addressing the challenges facing Danish VET and based on studies of the effects of these initiatives, the chapter presents the results of Danish research on the training environment and students' decision-making. First, however, a brief introduction to the Danish VET system will provide some context for the current challenges and initiatives.

A Brief Introduction to the Danish VET System

Danish VET comprises 101 programmes, further divided into 300 specialisations and tracks (https://www.ug.dk/uddannelser/erhvervsuddannelser). These programmes are clustered into four main subject areas: (i) Care, health, and pedagogy, (ii) Administration, commerce and business service, (iii) Food, agriculture and hospitality and (iv) Technology, construction and transportation. The programmes qualify graduates for skilled occupations, such as carpenter, chef, social and healthcare assistant, farmer, sales assistant etc. As in many other countries, Danish VET does not include programmes for e.g., nurses, doctors or engineers as these programmes are placed within the higher education sector. Within the programme for sales assistants, for instance, students can choose a specialisation such as digital trade or decorator. Programmes typically take 3.5–4.5 years but can vary from 2 to more than

6 years. Danish VET is categorised as a youth education programme; the majority of the 101 programmes are placed at the same level (NQF level 4) in the educational system as the general youth education programmes. One problem within Danish VET is that it is aimed at young people who have just completed lower secondary schooling, many of whom have yet to select a preferred occupation and are thus unsure of choosing a particular educational track. This is part of the explanation for low VET enrolment rates, with many young people preferring general upper secondary programmes, which provide an additional 3 years to decide on an occupational track. Traditionally, VET programmes lead to a qualification as a skilled worker, and it has proven difficult to reassure young people that VET can lead to some of the same possibilities as general upper secondary programmes. The latest reforms, outlined below, aim at easing the transition from VET to higher education, meaning that students with a VET qualification can continue in programmes at NOF levels 5 or 6 at academies of professional higher education or university colleges. VET programmes constitute a heterogeneous sector within the Danish educational system, hosted at VET colleges of four different types, each with their own traditions and cultures: agricultural, commercial, technical and social & healthcare colleges. This heterogeneity makes it difficult for young people to navigate the decision-making processes involved in choosing a VET programme.

Danish VET is organised according to the dual principle. Students embark on a VET programme with a basic course that mostly takes place at one of the four types of VET colleges. The basic course is divided into Basic Course 1 (6 months) and Basic Course 2 (6 months). Basic Course 1 is mainly aimed at young students enrolling directly after completing lower secondary education (Year 9 or Year 10) and provides a broad introduction to knowledge, skills, and competences within one of the four main subject areas mentioned above. Basic Course 2 is aimed at all students, including those who have completed Basic Course 1. Basic Course 2 is more specialised than Basic Course 1, thus qualifying and preparing students for the transition to one of the main programmes with their focus on a specific vocation. Having completed Basic Course 2, students apply for an apprenticeship and continue to alternate between practical workplace-based training and school-based training (main course). Students spend between half and two-thirds of their time in workplace-based training, depending on the specific programme. Thus, VET programmes include multiple transitions: from lower secondary to Basic Course 1, from Basic Course 1 to Basic Course 2 and from Basic Course 2 to apprenticeship training. Associated with the risk of student dropout, these transitions are a focus of attention in relation to improving the learning and training environment.

The dual system generates a focus on the interrelation of theory and practice and on the interrelation of the school-based and workplace-based parts of VET programmes, including the cooperation between VET colleges and enterprises. The social partners (i.e., employee and employer organisations and the association of local government authorities) actively participate at all levels of the system and strongly influence the development of VET programmes. Ensuring coherence between school-based and workplace-based training is traditionally the central pedagogical and curricular concern (Aarkrog & Wahlgren, 2021). Consequently, this

interrelation is an important part of the development of attractive training environments, focusing on how to include authentic experiences with practical work.

Even though VET is predominantly a youth education programme, it offers educational opportunities across a broad age group. This includes young people enrolling directly after lower secondary education (28% of the VET students enrolling during the school year 2019/2020), young adults (age 18–24) (33% enrolling during the school year 2019/2020) and adults (age 25+) (34% enrolling during the school year 2019/2020) (UVM, 2020). Thus, despite being enrolled in what are officially designated youth education programmes, most students are not transitioning directly from lower secondary school. In other words: VET is targeted at young people, but mainly attended by adults. The young adult (age 18-24) and adult (age 25+) VET students have often previously dropped out of education. Adults with relevant work experience may be able to reduce the duration of practical workplace-based training and hence their overall study time. Significant age differences combined with a diverse range of competences, experiences and needs make VET students a heterogeneous group and constitutes a similarly heterogeneous training and learning environment. Differentiated training that seeks to accommodate these differences is the other central pedagogical and curricular issue in Danish VET and consequently a core factor in the training environment.

VET teachers comprise teachers with qualifications for teaching in either lower secondary or general upper secondary programmes and teachers with qualifications as skilled workers within the particular occupational field. All teachers must have teaching qualifications corresponding to a 60 ECTS teacher-training programme at diploma level. Even though between half and two thirds of the programmes is comprised of workplace-based training, there is no mandatory teacher-training course for these trainers and supervisors. Furthermore, currently developments of the training environment only include the school-based parts of the programmes. However, concerns about the reach and attractiveness of VET programmes have prompted governmental intervention in the form of administrative and curriculum reforms.

Two Reforms

Two reforms of the Danish VET system have sought to address the two main challenges mentioned above: too few students enrol in and too few students complete a VET programme. The first reform from 2014 (UVM, 2014) included four targets: the first two addressing the issues above, the third and fourth target reflecting some of the assumptions about the reasons for the low intake and high dropout:

1. More students should enrol in VET directly after completing Year 9 or Year 10. By 2020, at least 25% of a cohort should enrol in VET directly after lower secondary education, increasing to 30% by 2025.

¹The remaining 5% are unknown student types (UVM, 2020).

- 2. More students should complete a VET programme. The completion rate should be at least 60% by 2020 and at least 67% by 2025.
- 3. VET should challenge all students to become as skilled as possible.
- 4. Confidence in VET and student wellbeing at VET colleges should be strengthened.

To reach these four targets, the reform proposed several initiatives embracing structural, curricular and pedagogical issues. To support young people's decision-making related to choosing an educational pathway, among these initiatives were strengthening guidance in lower secondary schools, including visits to vocational colleges; offering VET specialisations in Year 10 of lower secondary education; and prolonging the basic course with the addition of broad foundation courses (the abovementioned Basic Course 1) specifically aimed at supporting young students enrolling directly after lower secondary education and giving them more time to decide upon their educational pathway. In order to enhance the prestige of VET, admission requirements were established, requiring pass marks in the two subjects Danish and mathematics in the Year 9 or Year 10 examinations at the end of lower secondary education.² Based on an assumption that young people are attracted to the youthful learning environment typically found in general upper secondary programmes, an initiative was to establish a youth-oriented learning environment at VET colleges, including segregating young students from older students. A further assumption that the opportunity to continue into higher education is an important factor when young people choose an educational pathway led to the introduction of an easier transition from VET to higher education, mainly by strengthening Eux, a hybrid upper secondary programme that combines academic and vocational training. In an Eux programme, students are taught general subjects (such as Danish and mathematics) at levels that give access to higher education while also completing periods of workplace-based practical training. It was also felt that there was a need for improvement in the quality of the school-based training, focusing, for example, on differentiated training and practice-based training. Finally, acknowledging that dropout to a large extent occurred during transitions from school-based to workplace-based training - partly due to difficulties in obtaining an apprenticeship contract, partly due to 'practice shock' - the vocational colleges received funding to strengthen their partnerships with local enterprises and support students in applying for apprenticeships (Aarkrog, 2020).

In 2018, another reform was adopted, maintaining the four targets above and proposing ten further initiatives as a supplement to those outlined in the 2014 reform (UVM, 2018). To support young peoples' decision-making when choosing an educational pathway, one of the new initiatives was to strengthen the practical subjects in lower secondary education, including using vocational colleges as a venue for the practical training and testing of pupils in the practical subjects. Furthermore, teachers and guidance counsellors at the lower secondary level were now expected to gain knowledge about VET through professional development activities. Another

²It has been estimated that these admission requirements exclude 23% of the students who before the reform would have enrolled in VET (Aarkrog, 2020).

supplementary initiative concerned formative personal development, i.e., 'developing students' personal and social skills in preparation for working life'. The initiative was perceived as a counterpart to the strong focus on personal development in the general upper secondary programmes, reflected in an awareness of the characteristics of vocational personal development (Albrechtsen et al., 2020; Hammershøj, 2017). Of particular relevance for this chapter is an initiative to improve the quality of school-based training, with a focus on developing 'attractive teaching and training environments. Finally, it should be mentioned that, based on evaluations showing that the aforementioned Basic Course 1 had a positive impact on retention, the target group was extended to include students who at had completed lower secondary education up to 2 years prior to their enrolment in VET. Furthermore, a 10–week introductory course was established for young adults with a history of dropping out of educational programmes.

In sum, both reforms include initiatives focused on increasing the attractiveness of training environments and on supporting young people's decision-making processes when choosing an educational pathway.

Low Achievement of Policy Goals

The 2018 reform came into effect August 2019; thus, it is too early to measure its effects. Consequently, the current figures for students' enrolment in and completion of VET mainly show the effects of the 2014 reform, which came into effect in 2015. The latest figures from the Ministry of Education show no significant change in the enrolment rate during the period 2014–2021. In 2014, before the reform, 19.6% of young people enrolled in VET directly after Year 9 or Year 10; 2018 had the lowest intake of 18.4%, while the enrolment rate in 2020 was 19.8%. Among young adults (aged 18–24), enrolment decreased by 20% from the school year 2014/2015 to the school year 2019/2020. Thus, the first target of an enrolment rate of 25% in 2020 was not reached (UVM, 2020).

Likewise, the reform from 2014 does not seem to have significantly improved the completion rate. Among students who enrolled in 2012, which the Ministry of Education uses as a baseline for estimating the effects of the 2014 reform, 55% completed a VET programme. Among students who enrolled in 2019, the anticipated completion rate is 56% (UVM, 2019).

Concerning the third target – that VET should challenge all students to become as skilled as possible – the figures show a positive development in the sense that an increasing proportion of students enrolling in VET, enrol in the Eux programme that combines academic and vocational training. Thus, the percentage of VET students who enrol in Eux directly after lower secondary education has risen from 21% in 2015 to 32% in 2020. However, Eux mostly appeals to younger students, with 70% of the students enrolling in Eux in 2019/2020 being under 18 years old (UVM, 2020).

Students can choose to complete one or more subjects at a higher level than the mandatory requirements for the VET programme or they can choose a subject at

expert level. The percentage of students who choose subjects at a higher level has increased from 6% in 2015 to 13% in 2019. Likewise, the percentage of students completing a subject at expert level has increased form 7% in 2014 to 21% in 2019.

Concerning the fourth target, indicators for students' wellbeing have been compared over a period of 6 years (2015–2020). The results show that students' wellbeing within VET is generally high, scoring 4.1 on the summative wellbeing indicator on a scale from 1 (lowest) to 5 (highest). However, this score has not changed over the 6-year period (UVM, 2020).

Training Environment and Decision-Making

The implementation and impact of the 2014 reform has been monitored in a research project (Søndergaard et al., 2017) that included comparisons between students', teachers', and stakeholders' perceptions of factors related to the four targets mentioned above before and after the reform. In short, the results reflect the figures above, showing that the reform has had no significant impact in reaching the four targets However, the latest report from the research project points to two relevant interrelations: the relation between students' wellbeing and their perceptions of their teachers and the school-based training environment and the relation between students' wellbeing and their ability for decision-making. These matters are central in the 2018 reform. The research findings show no significant improvement in the quality of either the training or the learning environment. The 2014 reform bolstered professional development activities for teachers; however, the results show such activities have had no discernible positive impact on students' perception of the quality of the training they receive or their perception of their teachers' professional expertise. Thus, current professional development activities do not seem to address students' needs (Slotved et al., 2020, pp. 8-9). However, the results also show the importance of students' perceptions of their teachers. Thus, the findings point to statistical correlations between students' wellbeing, their risk of dropping out and their estimation of their teachers' competences. Students with a high opinion of their teachers are more likely to thrive and complete their studies. Furthermore, the statistical analyses show a positive correlation between students' wellbeing and their satisfaction with both the learning and social environment within VET. Based on these statistically significant results, the authors conclude that it would be beneficial to direct more attention towards improving the quality of training and the learning environment (ibid., pp. 8–9).

Concerning the other issue, students' decision-making skills, the research project finds indications that students have become better at making realistic and considered decisions. This improvement may be attributable to the introduction of Basic Course 1 where one of the main objectives is to provide young students with more time to consider their educational options. An additional contributing factor is that social and academic competences within the student body have improved as a result of the new admission requirements (Ibid., pp. 7–8). However, as will be shown

below, many VET students who enrol directly in Basic Course 2 have difficulties in making decisions regarding their educational pathways.

Following up on the findings above, the second part of this chapter focuses on research findings concerning two factors, which, it is argued, are important for improving enrolment and retention in VET: (i) students' perceptions of the training environment and (ii) students' decision-making processes in relation to education. The following questions will be addressed: What do students consider the key characteristics of a high-quality training environment, including competent teachers? What characterises students' decision-making processes when choosing an educational pathway? What are the interrelations between students' decision-making ability and their perceptions of the training environment?

The Concept of Training Environment Plays a Dominant Role in the 2018 Reform

Comparing the reforms from 2014 and 2018 points to a shift in focus regarding the training environment. In the 2014 reform, the main concept was 'youth education environment', which was referred to 10 times, with the focus being on attracting young people to VET by emphasising the importance of developing a youth-oriented educational environment like that typically found within general upper secondary education. This included the development of segregated educational environments for younger and older students, leading to a particular focus on Basic Course 1 and how it could support young people's learning. Consequently, the concept of adult environment is only used twice, while the concept of adult education environment is not mentioned at all. The concept of 'training environment' is used three times and 'learning environment' once. In the 2018 reform, meanwhile, the concept of 'training environment' dominates, being mentioned 12 times, while 'youth education environment' is mentioned three times and adult environment and adult education environment are not mentioned. The focus on training environment signals a focus on the teacher and on 'didactics', i.e., how teachers plan and conduct training.

The International Focus on Training and Learning Environments

The quality of the training and of the training environment is not only a central issue in the Danish reforms. An article about Finish VET concludes: 'To keep VET as an attractive option, there is a need to develop learning environments considered as having high quality' (Rinala & Nokelainen, 2020, p. 263). However, what is meant by high quality? In Finland, quality involves a discussion of the balance between learning in real-world work settings and academic school-based learning (Rinala &

Nokelainen, 2020). Likewise, an Australian study concludes that, to support students' decision-making regarding occupational choices, it is important that VET programmes enable students to experience a range of occupations, e.g., through collaborations with industry and practicum-based work experience (Billett et al., 2020). Similar results are presented in other studies, highlighting the importance of relevant training that includes authentic work tasks (Gessler & Howe, 2015) and authentic communities of practice (Boersma et al., 2016; Logan, 2006). In Denmark, the authenticity of the training provided is the main quality parameter in VET training environments (Wahlgren & Aarkrog, 2021). In Norway, raising quality has been equated with improving the real-world relevance of school-based training, emphasising that teachers play an important role in ensuring practical relevance. However, teachers' degree of focus on relating the training they provide to a workplace environment is dependent on their professional and academic background (Hiim, 2020). Other studies also point to teacher's central role in ensuring authenticity by relating authentic work tasks to current learning goals (Lou et al., 2010; Fjellström, 2014). Generally, VET teachers need to possess holistic competences. In an Australian study, the author argues against a reductionist view of the teacher's role, advocating for teaching as a vocation (a calling) centred on building relationships with students. This calls for an understanding of each individual teacher's unique qualities (Schmidt, 2021).

The schools that the students attend before enrolling in VET, as well as the VET schools or colleges, play an important role in young people's decision-making processes. The focus is often on the role of guidance counsellors. However, the teacher also has significant influence; a comprehensive Australian study shows that according to students, teachers are the group with the second greatest influence on students' decisions about post-school pathways, with parents having the greatest influence and guidance counsellors in fourth place. One explanation for teachers' influential role is that students interact much more with their teachers than with e.g., guidance counsellors (Billett et al., 2020). Furthermore, the Australian study shows that teachers' own experiences are central in determining the kind of advice they give their students (ibid). In a Danish context, this means that it is important that young people in lower secondary education encounter teachers with knowledge and experience of VET. However, this is seldom the case.

A Danish Research Project About Training Environments

Following up on the 2018 reform, the focus on training environments resulted in ministerial funding for a project on this topic that explored perceptions of the VET training environment among various types of students (young and adult students). In this project, the training environment was divided into three concepts: the

274 V. Aarkrog

technical environment, concerning training in classrooms and workshops;3 the social environment, comprising the relations between teachers and students and among students; and the physical environment, concerning the premises and facilities at the VET colleges. Because the risk of dropout is particularly high during the various transitions in VET programmes (as described above), the research project focused on these transitions (Epinion & DPU, 2020). This chapter draws on data from the project, based partly on a literature review of research-based findings concerning training environments in VET and partly on case studies of the training environments in 24 VET programmes at 13 VET colleges. The literature review was intended to qualify data collection and analysis of the 24 case studies and involved publications during the period 2010–2019 (Aarkrog & Wahlgren, 2020). For the 24 case studies, programmes and colleges were selected to reflect the heterogeneity in terms of student population, college size, geographical location, and vocational branch. In each case study, the data included interviews with students, teachers, supervisors, and managers combined with guided tours of the college and class observations.

The literature review led to the identification of the following factors as having a positive influence on VET training environments: Concerning the technical environment, the concept of a 'powerful training environment' includes students being assigned authentic tasks reflecting workplace practices in the relevant trade or industry and teachers using training methods that actively involve and engage students. Other factors include teachers differentiating challenges and tasks to match students' diverse needs and abilities, a focus on students' acquisition of professional/vocational skills and providing a safe training environment where students feel comfortable (Placklé et al., 2014). To establish authentic work-based learning tasks, teachers must have knowledge not only about the subject they teach, but also about the local labour market, enterprises, and masters (Mårtensson et al., 2019). Individualised support and differentiated training have a positive impact on students' wellbeing (Hargens, 2013), as does teachers' ability to guide students in formulating and sticking to learning goals, providing regular feedback on their progress (Cedefop, 2016; Mariager-Andersson et al., 2019; Becker et al., 2018; Martínez-Serrano et al., 2019). Another central factor characterising positive training environments that support students' learning and development is that teachers have clear and positive expectations for their students (Helaire, 2014; Louw, 2013; Pinya et al., 2018).

Concerning *the social environment*, the literature review highlights the importance of students having a positive relationship with their teachers, and how, reciprocally, teachers are role models for students, both in and outside the classroom—acting not only as a role model for the particular occupation, but also a more general adult role model. The student-teacher relationship involves caring for students and strengthening their self-efficacy (Murray & Mitchell, 2016). Teachers' socioemotional competences are crucial for relational work; they need to be sensitive,

³Workplace-based training was not included in the project.

attentive and able to handle the students' feelings (Aspelin, 2019; Mariager-Andersson et al., 2019). Furthermore, teachers need to promote a strong social environment among students it has been shown that when students experience being included in a close-knit community, it has a positive impact on completion and retention in education (Adams, 2012). Teachers' relationships with their students and ability to establish and engage in such relationships are considered one of the most important factors for students' wellbeing (Dutschke, 2018).

Finally, *the physical environment* should support students' desire for authentic training environments, including the integration of general and vocational subjects and classes; for example, by blurring the boundaries between classroom-based theoretical instruction and workshop-based practical training' (Aarkrog & Wahlgren, 2020).

Essentially, the literature review showed that teachers are the most important factor for students' wellbeing and retention in education.

The case studies of 24 VET programmes at 13 VET colleges confirmed the results of the literature review. As such, these case studies underlined the positive influence of teachers with solid knowledge of the subjects they teach, who are professional role models, whose teaching is practice-based and differentiated, who regularly give students feedback, and who have equal dialogues with the students. The case studies also confirmed the importance of peer-to-peer relationships, both in relation to group work and friendships.

The case studies also provided new insights through their focus on transitions within VET programmes. They showed that an environment intended to support students' wellbeing and educational retention can benefit from the inclusion of introductory interviews by teachers with students, ensuring that the introductory programme strikes a balance between technical and social aspects, and providing fixed boundaries to help give students peace of mind. At the transition from Basic Course 2 to apprenticeship training in an enterprise, students need to be prepared for the realities of working life. The students in the case studies sometimes expressed disappointment with workplace training environments, indicating that VET colleges could help alleviate poor learning environments in enterprises by strengthening the links between school-based training and workplace-based training in ways that students find meaningful.

Related to the goal of improving enrolment and completion rates in VET, the lesson learnt from the study is that teachers should embrace their role as significant adults, with many students having no fruitful relationship with parents or other relatives. Based on the results, it seems reasonable to conclude that VET colleges can raise the standing of VET by establishing a safe environment where students feel secure in the company of teachers and peers (Epinion & DPU, 2020). Interestingly, according to the students in the study, a safe environment does not mean one that is laissez-faire. On the contrary, they want to be challenged during training and ask for structure and for teachers to have clear expectations regarding their academic and vocational development.

The same results were found in a project about dropout, showing that students could overcome crisis through safe and stable contact with a teacher or supervisor.

Furthermore, teachers and supervisors reported that efforts to organise and systematically maintain social relations among students had a positive impact on student well-being and retention (Aarkrog et al., 2018). Many VET colleges in Denmark would probably claim that they have already established training environments that are responsive to the students' wishes and needs described above. However, the project about dropout showed the resources made available in the project allowed participating teachers to focus their efforts on the individual student. An example from a social and healthcare college illustrates this individual 'treatment': A female student was uncertain about whether she should continue in the programme. During an interview with the student, a guidance counsellor discovered that she felt uncomfortable raising her hand during lessons. Consequently, the counsellor made an agreement with the student and her teacher that she should be encouraged to raise her hand once in a specific class. The teacher did so, and the student raised her hand. Now feeling a bit more confident, the student, in cooperation with the teacher, was able to take the next step in her development: raising her hand during other lessons. The example gives an idea of the amount of time and resources needed to support such students' development of self-efficacy. Nevertheless, the results raise a question concerning the role of teachers: What competences – not only technical skills, but also social and personal competences – must teachers develop in order to positively influence completion rates and the standing of VET?

VET Students Have Difficulties in Making Decisions

Decision-making is a central issue when it comes to choosing and completing education. Studies of young people's decision-making processes show that these processes are often not logical and systematic, but irrational and oscillating. By focusing on the quality of VET students' decision-making processes, it may be possible to increase enrolment and completions rates.

The project about student dropout mentioned above was conducted 2017–2019. The project dealt with decision-making processes related to dropout among young adults (age 18–24) who had enrolled in either a VET programme or a basic adult education course (the latter corresponding to lower secondary Year 9). The project focused on these young adults' decision-making processes when choosing an educational pathway and their deliberations about staying in or dropping out of a VET programme. The project's results have been presented in various articles, e.g., (Aarkrog et al., 2018; Aarkrog & Wahlgren, 2021).

Research into Decision-Making

Decision-making is a central issue in this monograph, providing knowledge about factors that shape decision-making (Billett etal., 2022b) and showing that young people as well as their parents and teachers sometimes have limited information about VET and that providing systematic information about VET has a positive impact on young people's ability to make rational decisions (Hodge et al., 2022). As such, there is a need for greater focus on informing not only the young people themselves, but also influential figures such as parents and teachers about VET and the occupations it serves (Billett et al., 2022a). Chapter 11, 'Perspectives on informing post-school pathways: a Vietnamese case study', concludes that young people and their parents differ in their perspectives on VET as an educational pathway and, of particular relevance for this chapter, show that a 'friendly learning environment' is the most important factor influencing students' decisions to engage in VET (Le, 2022). Generally, young people have difficulties in making career and educational choices. An Australian study shows that four in ten 14-15 years olds did not know what career they wanted to pursue and that there was a mismatch between their career ambitions and educational abilities (Gemici et al., 2014).

In this chapter, the primary focus is not on factors that shape decision-making, but rather on the quality of young people's decision-making processes. The argument is that many young people and VET students need to develop or strengthen their decision-making skills. Depending on the strength or weakness of the decision and how rational the decision-making process is, the student will be more or less likely to be influenced by incidents in the training environment. Walther et al. focused on the quality of such decision-making processes, studying constellations of decision-making at the micro level, i.e., the young person's degree of motivation and resilience combined with their interactions with parents, teachers, or counsellors. Their study highlights how the individual degree of motivation and resistance to 'unfavourable external conditions' led to different constellations of decisionmaking processes (Walther et al., 2015). Based on 80 interviews with high school dropouts, Lessard et al. systematised decision-making processes leading to either remaining in or dropping out of school. They showed that the decision-making process is influenced by factors that pull the students toward the school as well as factors that pull the student away from school. The authors used the concept of 'teetering' to describe students who are off balance during their educational journey. Being off balance can be influenced by a complex set of issues, with Lessard et al.'s significant contribution being to zoom in on the decision-making processes leading to dropout (Lessard et al., 2008). Other studies likewise show that dropout is not a sudden impulse but based on a long process of disengagement and withdrawal (Rumberger & Rotermund, 2012; Brown & Rodriquez, 2009).

The study of students' decision-making processes when choosing educational pathways included an operationalisation of different kinds of processes. This operationalisation was based on interviews with 31 students. Among those, five students were not able to reach a decision. The categorisation of the remaining 26 students

278 V. Aarkrog

resulted in the identification of three types of decision-making process: 'intuitive emotional decisions without seeking advice', 'intuitive emotional decisions after seeking advice' and 'rational decisions after seeking advice' (Aarkrog & Wahlgren, 2021). The results show that most of the students belong to the first two of these categories (19 students), making decisions intuitively, triggered by a sudden impulse or idea. Their decisions are frail. Many of these students make decisions without consulting others, and if they do so, they typically consult parents or friends rather than someone with specific knowledge about the programme or occupation they are considering. Furthermore, students who belong to these two categories often make unrealistic decisions, e.g., decisions about future careers and occupations that are not related to the student's current enrolment in a VET programme or decisions that do not reflect their competences and abilities (ibid.). The students belonging to these two categories often expressed that they had not actively and autonomously made the decisions themselves, or that they had been forced into making a decision, for instance in order to receive state funding or to please a social worker, guidance counsellor or parent. They did not take ownership of their decisions but felt that the decision was made by itself or by other, often unspecified, persons. Lacking commitment to their frail decisions, the students could easily be knocked off course, their decisions easily dismissed (Aarkrog et al., 2018).

Summing up, the study showed that the majority of the interviewed students make frail decisions without seeking professional support.

Students with Frail Decisions Are Easily Influenced by Incidents in the Training Environment

In the following, the aim is to link VET students' decision-making processes to their experiences with the training environment, showing that incidents occurring in the training environment have a strong influence on students' decisions.

As mentioned above, one of the aims in the project about dropout was to study how incidents in the training environment influence students' decision-making in terms of staying in or dropping out of a VET programme. The empirical data included weekly student surveys and follow-up interviews. During an autumn term of 15 weeks, through weekly surveys, a class of students from each of 14 colleges were asked to answer four questions on a Likert scale ranging from 1 (lowest) to 7 (highest). The four questions concerned the students' perceptions of their current programme:

- 1. How satisfied are you with this programme?
- 2. How satisfied are you with the lessons?
- 3. How satisfied are you with the atmosphere at the school?
- 4. How strong is your motivation to continue in this programme? (ibid., p. 116).

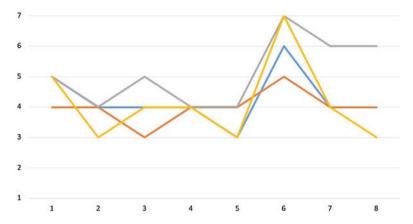


Fig. 13.1 Mark, male student. Blue: satisfaction with the programme; orange: satisfaction with the lessons, grey: satisfaction with the atmosphere; yellow: motivation to continue in the programme (Aarkrog et al., 2018)

Based on the students' answers, four graphs were plotted for each student. An example of such a graph is shown in Fig. 13.1. The purpose of the surveys was to get a better sense of the students' perceptions of the VET programmes and their motivation for continuing in the programme. Across the 14 schools, 31 students (not the same 31 students mentioned in the previous section) whom the teachers or supervisors considered to be at risk of dropping out were selected for interviews. The results of the surveys served as a base for the interviews, with participating students pinpointing their thoughts and deliberations at points where the graphs showed variations.

As described above, most of the students made emotional and intuitive decisions. The results showed that these students' current perceptions of and experiences with the training environment had a strong influence on their wellbeing and consequently on their decision-making regarding whether to stay in or drop out of the programme. These students were liable to doubt their decisions. Furthermore, minor incidents in the training environment often tipped the scales one way or the other. For example, one male student reported that he had not done well in a particular maths lesson, which led him to doubt whether he should continue with his studies. Similarly, a female student had a brief conflict with a classmate that resulted in a declining in her responses to the four questions. As such, seemingly minor episodes can have a significant impact, leading students to reassess their decisions.

Meanwhile, the small group of students categorised as having made rational decisions, including the setting of precise and realistic goals, were relatively immune to such incidents in the training environment. They seemed to use their decisions and goals as a compass when pursuing their educational ambitions, remaining unaffected by minor classroom events. Thus, students' ability to make rational decisions based on precise goals is important in reducing educational dropout.

While minor incidents in the training environment proved influential among students with frail decisions, the same training environment was also crucial in getting the students back on track. The teetering process did not necessarily result in students dropping out. Some students had experiences that led to steep drops in their graphs, but these trends were reversed after a week or two. The main reason for the rise, and consequently for their decision to stay in the programme, was generally the student's relation to a teacher or guidance counsellor. Thus, the characteristics of a strong training environment, outlined above, had a positive influence on students' decision to continue their studies: the students praised teachers who believed in their ability to learn e.g. maths; who differentiated tasks to help all students thrive; who organised training in ways that showed students how seemingly abstract knowledge can be applied in real-world situations in their chosen occupation; who regularly reached out to individual students to enquire about their wellbeing; who helped students set realistic goals and provided systematic feedback; and who invested in establishing social relations with and among the students.

In short, the results showed that the quality of the students' decision-making had significant influence on their ability to remain focused, not getting distracted by episodes in the training environment. However, at the same time, the quality of the training environment, in particular the quality of the teacher's professional and social competences, was crucial for students who regularly experienced doubts regarding their choice of educational pathway (Aarkrog et al., 2018; Wahlgren et al., 2018).

Discussion

Student decision-making is included in the initiatives central to both the reforms mentioned above. Related to the relatively low enrolment and relatively high dropout rates, one of the assumptions behind the 2014 reform was that VET students need more time to choose an educational pathway. Consequently, the basic course was extended by 6 months (cf. above). Acknowledging that more time did not improve either enrolment or retention, the 2018 reform focused on young people's choice of education prior to their enrolment in VET (cf. above).

However, the initiatives in the two reforms turn a blind eye to the difficulties related to young people's decision-making processes. The reforms provide time for decision-making and point to the importance of educational guidance at the lower secondary level, but they do not address how to develop young people's ability to make rational and realistic decisions. The results from the two projects outlined above, respectively focused on the training environment and on dropout, show that young people need to develop decision-making skills when choosing an educational pathway. Furthermore, making such decisions is a key skill for students completing a VET programme. The results point to the importance of guiding the individual student's decision-making process, for example by helping them to identify their ambitions, preferences, and aspirations and transform them into realistic goals and

decisions. As such, the findings suggest that it would be beneficial to include the development of decision-making skills in lower secondary and VET curricula.

The results also show that the training environment has a strong influence on students' decision-making. Particularly important are the professional, relational and social engagement and competences of teachers. The 2014 reform includes a focus on professional development activities for teachers. However, research on the implementation and effects of the 2014 reform indicates that these activities have failed to make an impact. One possible explanation might be that the activities have not focused sufficiently on developing the competences that are important in sustaining high quality training environment. To the portrait of the engaged teacher, who ardently commits himself to bringing out the best in the individual student, one may ask if the teachers can develop these abilities through competence development? Or put another way: What are the sources of teachers' professional motivation? Or in reference to (Schmidt, 2021) above, what makes teachers perceive their job as a vocation?

The study above (Slotved et al., 2020) proposes a correlation between decisionmaking skills and academic and social competencies. The authors conclude that there has been an improvement in students' decision-making skills and suggest that this is because the introduction of stricter admission requirements has led to better social and academic competences within the student body. The project about dropout referred above also identified a link between students' decision-making skills and their competency and achievement. However, unlike the study by Slotved et al., this project found that a significant number of participating students were unable to make rational decisions regarding their educational pathways. A possible explanation for this discrepancy is that the two studies cover different age groups among VET students. The average age of students enrolling in VET in Denmark is 21 years. Thus, the majority of the students are young adults or adults. Meanwhile, the 2014 and 2018 reforms largely focus on young students enrolling directly after lower secondary education (aged 15–16). This focus is due a particular political objective of improving enrolment rates within youth education programmes among young students, and of making VET, as part of the youth education system, an attractive post-lower secondary educational pathway. Regarding the standing of VET, one might argue that there should be greater focus on the groups constituting the majority of VET students: young adults and adults. Focusing on these groups, it is paramount to develop students' decision-making skills. This poses the obvious question of whether decision-making skills and the quality of the training environment in further studies will prove to crucial factors in improving the standing of VET, manifested in enrolment and completion rates?

Related to the present chapter's focus on training environments, the chapter (x) on Vietnamese VET shows that, when ranking the importance of information encouraging young people to engage in VET, students gave the learning environment in VET the highest ranking whereas parents ranked this factor in seventh place (Le, 2022). These results are interesting for two reasons. Firstly, students perceive the training environment as crucial for their choice of educational pathway, indicating that the training environment should be included in considerations of how to

enhance the standing of VET. Secondly, students and parents do not necessarily share the same perceptions and opinions regarding factors that influence enrolment in a programme. This raises the issue of who is best placed to advise students during their decision-making processes. The research referred to in the current chapter shows that, like Vietnamese VET students, Danish VET students often consult their parents or friends when making decisions about their educational pathways. However, the Vietnamese study shows that parents might have different priorities. Once again, the arrow points to the importance of teachers or guidance counsellors with solid knowledge of VET and the occupations it serves.

Conclusion

The jumping-off point for this chapter was the fact that the initiatives at the core of two recent Danish VET reforms aimed at enhancing the standing of VET have so far had no significant positive impact in terms of the four targets: that more students should enrol in VET; that more students should complete VET; that VET should challenge all students to become as skilled as possible; and that confidence in VET and student well-being at VET colleges should be strengthened. While acknowledging that there does not seem to be a single, simple solution to the problem of the low standing of VET, the chapter has focused on two crucial factors in reaching these targets: students' perceptions of the training environment and their decision-making skills.

Based on qualitative data from two research projects, I have shown that VET students see teachers as playing the key role in ensuring a training environment conducive to learning, particularly emphasising that teachers should act as professional role models, engage in their students' professional development, and encourage and facilitate activities that strengthen students' wellbeing. Furthermore, I have shown that many students struggle with making rational and reflected decisions and sticking to them in spite of incidents in the training environment. At the same time, however, the training environment, and in particular the teacher, can have a positive influence on students' decision-making processes. The results showed that teachers are a strong pull factor, ensuring that students complete the VET programme. Furthermore, teachers can play a significant role in guiding students during decision-making processes, as well as training their decision-making skills – skills that are key to reaching the four targets and thereby improving the standing of VET.

References

- Aarkrog, V. (2020). The standing and status of vocational education and training in Denmark. *Journal of Vocational Education & Training*, 72(2), 1–19.
- Aarkrog, V., & Wahlgren, B. (2020). Videnskortlægning. Undervisningsmiljø i erhvervsuddannelserne [Eng: Knowledge overview. Training environment in VET]. DPU, Aarhus Universitet.
- Aarkrog, V., & Wahlgren, B. (2021). Goal orientation and decision-making in education. *Vocations and Learning*. (in press).
- Aarkrog, V., Wahlgren, B., Larsen, C. H., Mariager-Anderson, K., & Gottlieb, S. (2018). Decision-making processes among potential dropouts in vocational education and training and adult learning. *International Journal for Research in Vocational Education and Training (IJRVET)*, 5(2), 111–129.
- Adams, B. E. (2012). Linked learning: Can career and technical education programs take California high schools into the 21st century? California Lutheran University.
- Albrechtsen, T. R. S., Louw, A. V., Gimmler, A., & Weissert, N. (2020). Program om karakter-dannelse på erhvervsuddannelserne: opsamling på forundersøgelse [Eng: Programme about formation of character in VET; compilation of pilot study]. Styrelsen for Undervisning og Kvalitet.
- Aspelin, J. (2019). Enhancing pre-service teachers' socio-emotional competence. *International Journal of Emotional Education. Special Issue*, 11(1), 153–168.
- Becker, S., Pfost, M., & Artelt, C. (2018). New challenges, new motivation? Goal orientation development in graduate of higher track schools and their peers in *vocational training*. *Frontiers in Psychology*, *9*, 1–15.
- Billett, S. (Ed.). (2020). Perspectives on enhancing the standing of vocational education and the occupations it serves. *Journal of Vocational Education & Training*, 72(2), 161–314.
- Billett, S., Choy, S., & Hodge, S. (2020). Enhancing the standing of vocational education and the occupations it serves: Australia. *Journal of Vocational Education & Training*, 72(2), 270–296.
- Billett, S., Dymock, D., Choy, S., Hodge, S., & Le, A. H. (2022a). Chapter 18: Practical strategies and distributed responsibilities: Enhancing the standing of vocational education and the occupation it serves. In S. Billett, B. E. Stalder, A. Vibe, S. Choy, S. Hodge, & A. H. Le (Eds.), *The standing of vocational education and the occupations it serves: Current concerns and strategies for enhancing that standing*. Springer. (in press).
- Billett, S., Dymock, D., Hodge, S., Choy, S., & Le, A. H. (2022b). Chapter 6: Shaping young people's decision-making about post-school pathways: Institutional and personal factors. In S. Billett, B. E. Stalder, A. Vibe, S. Choy, S. Hodge, & A. H. Le (Eds.), *The standing of vocational education and the occupations it serves: Current concerns and strategies for enhancing that standing*. Springer.
- Boersma, A., Dam, G., Wardekker, W., & Volman, M. (2016). Designing innovative learning environments to Foster communities of learners for students in initial vocational education. *Learning Environments Research*, 19(1), 107–131. https://doi.org/10.1007/s10984-015-9203-4
- Brown, T., & Rodriquez, L. F. (2009). School and the co-construction of dropout. *International Journal of Qualitative Studies in Education*, 22(2), 221–242.
- Cedefop. (2016). Leaving education early: putting vocational education and training centre stage. Volume II: evaluating policy impact (Cedefop Research Paper, 58). Publications Office.
- Danmarks Statistik. (2021). Størst frafald på erhvervsuddannelserne [Eng: Largest dropout in VET]. Nyt fra Danmarks Statistik no 130.
- Dutschke, A. (2018). Understanding VET teacher attitudes to student support in a major public VET provider. *International Journal of Training Research*, 16(2), 163–181.
- Epinion & DPU, Aarhus Universitet. (2020). God praksis for undervisningsmiljøer på erhvervsuddannelserne [Eng: Good practice for training environments in VET]. Børne- og Undervisningsministeriet, Styrelsen for Undervisning og Kvalitet (STUK).

- Fjellström, M. (2014). Vocational education in practice: A study of work-based learning in a construction programme at a Swedish upper secondary school. *Empirical Research in Vocational Education and Training*, *6*(1), 1–20. https://doi.org/10.1186/1877-6345-6-2
- Gemici, S., Bednarz, A., Karmel, T., & Lim, P. (2014). *The factors affecting the educational and occupational aspirations of young Australians* (Research Report 66). Longitudinal Surveys of Australian Youth.
- Gessler, M., & Howe, F. (2015). From the reality of work to grounded work-based learning in German vocational education and training: Background, concept and tools. *International Journal for Research in Vocational Education and Training*, 2(3), 214–238.
- Hammershøj, L. G. (2017). *Dannelse i uddannelsessystemet* [Eng: Personal formation in the educational system]. Hans Reitzels Forlag.
- Hargens, D. K. (2013). Examining student achievement and interventions for underprepared vocational math students. Iowa State University.
- Helaire, A. (2014). Career technical education instructors' perceptions of adult students' academic ability in career technical education classes. Pepperdine University, Graduate School of Education and Psychology.
- Hiim, H. (2020). The quality and standing of school-based Norwegian VET. *Journal of Vocational Education & Training*, 72(2), 228–249.
- Hodge, S., Billett, S., & Choy, S. (2022). Chapter 16: Influences on post-school decision-making: Perspectives of school students, parents, teachers (phase 1). In S. Billett, B. E. Stalder, A. Vibe, S. Choy, S. Hodge, & A. H. Le (Eds.), The standing of vocational education and the occupations it serves: Current concerns and strategies for enhancing that standing. Springer.
- Le, A. H. (2022). Chapter 11: Perspectives on informing post-school pathways: A Vietnamese case study. In S. Billett, B. E. Stalder, A. Vibe, S. Choy, S. Hodge, & A. H. Le (Eds.), The standing of vocational education and the occupations it serves: Current concerns and strategies for enhancing that standing. Springer.
- Lessard, A., Butler-Kisber, L., Fortin, L., Marcotte, D., Potvin, P., & Royer, É. (2008). Shades of disengagement: High school dropouts speak out. Social Psychology of Education, 11(1), 25–42.
- Logan, C. D. (2006). Circles of practice: Educational and professional graphic design. *Journal of Workplace Learning*, 18(6), 331–343. https://doi.org/10.1108/13665620610682062
- Lou, S.-J., Shih, R.-C., Tseng, K.-H., Diez, C. R., & Tsai, H.-Y. (2010). How to promote knowledge transfer through a problem-based learning internet platform for vocational high school students. *European Journal of Engineering Education*, 35(5), 539–551.
- Louw, A. W. (2013). Pedagogical practices in VET: Between direct and indirect teacher approaches. Nordic Journal of Vocational Education and Training (NJVET), 3.
- Mårtensson, Å., Andersson, P., & Nyström, S. (2019). A recruiter, a matchmaker, a firefighter: Swedish vocational teachers' relational work. *Nordic Journal of Vocational Education and Training*, 9(1), 89–110.
- Mariager-Anderson, K., Gottlieb, S., Wahlgren, B., & Aarkrog, V. (2019). At Blive på sporet. Nye perspektiver og bæredygtige løsninger på uddannelsesfrafald for unge voksne. [Eng: To stay on track. New perspectives and sustainable solutions to dropout among young adults]. DPU, Aarhus Universitet.
- Martínez-Serrano, M.-E., Pérez-Herrero, M.-D.-H., & Gurguera, J.-L. (2019). Life project clarity in vulnerable adolescents. In C. Nägele & B. E. Stalder (Eds.), *Trends in vocational education* and training research. VETNET ECER procedings 2019.
- Murray, S., & Mitchell, J. (2016). Teaching practices that re-engage early school leavers in further education: An Australian study. *Journal of Further and Higher Education*, 40(3), 372–391.
- Pinya, C., Salvà, F., Pomar, M. I., & Calvo, A. (2018). Preventing school drop-outs in intermediate VET from the schools' perspective. In C. Nägele & B. E. Stalder (Eds.), *Trends in vocational education and training research. VETNET ECER procedings 2018*.
- Placklé, I., Könings, K. D., Jacquet, W., Struyven, K., Libotton, A., van Merriënboer, J. J. G., & Engels, N. (2014). Students' preferred characteristics of learning environments in vocational secondary education. *International Journal for Research in Vocational Education and Training*, 1(2), 107–124.

- Rinala, H., & Nokelainen, P. (2020). Standing and attractiveness of vocational education and training in Finland: focus on learning environments. *Journal of Vocational Education and Training* 72(2), 1–20. https://doi.org/10.1080/13636820.2020.1744696
- Rumberger, R. W., & Rotermund, S. (2012). The relationship between engagement and high school dropout. In S. L. Christenson, A. L. Reschly, & C. Wylie (Eds.), *Handbook of research on student engagement*. Springer.
- Schmidt, T. (2021). Teacher as person. The need for an alternative conceptualization of the 'good' teacher in Australia's vocational education and training sector. *Journal of Vocational Education & Training*, 73(1), 148–165.
- Slotved, M., Jakobsen, M. L., Larsen, K. S., Mortensen, N. P., Koudahl, P., Andersen, H. L., & Cuzulan, B. (2020). *Grundforløb på erhvervsuddannelserne tre år efter reformen* [Eng: Basic course in VET three years after the reform]. VIVE– Viden til Velfærd Det Nationale Forsknings- og Analysecenter for Velfærd.
- Søndergaard, N. M., Andersen, H. L., Slottved, M., Friche, N., Kollin, M. S., Greve, J., Larsen, K. S., Hjermov, P., Madsen, A. S., & Andersen, V. N. (2017). *Grundforløb på erhvervsuddannelserne efter reformen* [Eng: Basic courses in VET after the reform]. KORA & EVA.
- UVM. (2014). Aftale om Bedre og mere attraktive erhvervsuddannelser. 24. februar 2014. Regeringen (Socialdemokraterne og Radikale Venstre), Venstre, Dansk Folkeparti, Socialistisk Folkeparti, Konservative Folkeparti og Liberal Alliance [Eng: Agreement on Better and More Attractive Vocational Education and Training]. https://www.uvm.dk/erhvervsuddannelser/nyheder-lovgivning-og-reform/politiske-aftaler-og-oplaeg
- UVM. (2018). Aftale mellem Regeringen, Socialdemokratiet, Dansk Folkeparti, Radikale Venstre og Socialistisk Folkeparti om Fra folkeskole til faglært Erhvervsuddannelser til fremtiden [Eng: From comprehensive school to skilled worker VET for the future]. https://www.uvm. dk/erhvervsuddannelser/nyheder-lovgivning-og-reform/politiske-aftaler-og-oplaeg
- UVM (2019) Profilmodellen. [Eng: The profile model].
- UVM. (2020). Status redegørelsen for implementering af erhvervsuddannelsesreformen Skoleåret 2019–2020 [Eng: Status update about the implementation of the VET reform The school years 2019–2020]. Undervisningsministeriet.
- UVM. (2021). Ansøgere til EUD landstal (mål 1) [Eng: Applicants to VET National figures (target 1)]. Undervisningsministieriet.
- Wahlgren, B., & Aarkrog, V. (2021). *Pædagogisk Indblik: Sammenhæng mellem teori og praksis i erhvervsuddannelserne* [Eng: Pedagogical insight. Interrelation of theory and practice in VET]. DPU, Aarhus Universitet (in press).
- Wahlgren, B., Aarkrog, V., Mariager-Anderson, K., Gottlieb, S., & Larsen, C. H. (2018). Unge voksnes beslutningsprocesser i relation til frafald. En empirisk undersøgelse blandt unge voksne i erhvervs- og almen voksenuddannelse [Eng: Young adults' decision-making processes in relation to dropout. An empirical study among young adults in VET and adult general education I]. *Nordic Journal of Vocational Education and Training*, 8(1), 98–113.
- Walther, A., Warth, A., Ule, M., & du Bois-Reymond, M. (2015). 'Me, my education and I': Constellations of decision-making in young people's educational trajectories. *International Journal of Qualitative Studies in Education*, 28(3), 349–371.

Chapter 14 Elevating the Standing of Vocational Education and Training in Romania



Maria-Carmen Pantea

Abstract Initial vocational education and training (VET) has been intensely reformed in Romania. Elevating its status has been a recent concern, in the context of strong pressure from industry. However, it requires more than an 'image makeover' and the persuading of parents and young people. This analysis is based on a qualitative study, involving over 250 young people, and 100 teachers, employers and policymakers. The first part looks at the reforms since the fall of Communism. The second part highlights the work done to reshape the image of VET, based on the efforts of schools to fill the growing number of places, and attempts by companies to reframe perceptions of blue-collar jobs. The last part challenges the idea that the problem of VET is (mainly) one of image. The chapter discusses the mixed quality of education in VET, and questions the ambivalent role played by a range of shortterm training programs. It also suggests that the dual system, despite strong policy endorsement, creates a small niche, but is not a structural remedy, as it does not commit towards social inclusion goals. The limitations of the campaigns that promote VET are also considered: the gendered nature of the 'success stories' and the failure to highlight the precarious nature of many employment options.

Keywords Covid-19 · Communism · Dropout · Dual system · European Commission · Higher education · High school · Migration · Precarious work · Romania · Rural · Social inclusion

This work was supported by a grant of the Romanian National Authority for Scientific Research and Innovation, CNCS – UEFISCDI, project number PN-III-P4-PCE2021-0366.

M.-C. Pantea (⊠)

Department of Social Work, 'Babeş-Bolyai' University, Cluj-Napoca, Romania e-mail: maria.pantea@ubbcluj.ro

288 M.-C. Pantea

Initial vocational education and training (henceforth referred to as VET) is gaining policy momentum in Europe. A commitment to make VET a "first choice" was part of the Skills Agenda for Europe in 2016–2020 and the emphasis has remained. As elsewhere, VET has been, by far, the most intensely reformed educational sector in Romania. Elevating its status is a recent policy concern, and comes as a late remedy to a decision to interrupt VET, and in the context of strong pressure from industry.

This chapter discusses the main reforms of the Romanian VET system over the past 30 years, including recent efforts to reshape its image. It examines the unresolved tensions that arise when meaningful policy goals cut across young people's choices, and questions the assumption that the problem of VET is (mainly) one of image, as current policy efforts suggest. Based on a critical discussion of the quality of education in Romania's VET, the chapter argues that elevating its standing requires more than an 'image makeover' and social marketing. Given the severe socio-economic discrepancies in the country, and the increased precarization of jobs, the arguments about young people's 'disproportionate aspirations' hold a middle-class bias and do not apply to the groups that VET is tapping into. Finally, the chapter brings into debate the ambivalent role played by a range of EU-funded, short-term training courses and suggests that the emerging dual system creates a new niche, but not a structural remedy. Several 'blind spots' in the media campaigns promoting VET are also considered, in particular the gendered nature of the 'success stories' and the failure to highlight the precarious nature of employment. The chapter calls for a more consolidated understanding of the political economy of VET and issues of social justice.

The chapter is based on extensive qualitative research into Romania's initial VET system: interviews and focus groups involving over 250 young people and around 100 teachers, employers and policymakers. The fieldwork was carried out between 2017 and 2018 and involved visits to over 30 VET schools from five (out of eight) developmental regions in Romania. The overriding majority of the schools were located in Transylvania, a historical province with high economic development. The research accounted for a wide variety of VET areas, rural/urban discrepancies and regional differences, gender and ethnicities. However, it cannot claim 'statistical representativeness'.

The interviews and focus groups explored what had brought the young people to VET, their overall assessment of the experience and their imagined (working) futures. Interviews with teachers and employers focused on the recent challenges in promoting VET and their perceptions of the reforms and trends. Formal permissions, from the local school authorities, school leadership and the young people themselves, were secured. Recorded data was transcribed *verbatim* and ethnographic notes were carefully taken.

The research also integrated ethnographic findings from national and European events on VET (i.e., a national consultation process on VET reform, the European Vocational Skills Weeks, and the editorial board meetings of the European Training Foundation – the *EU* agency supporting countries surrounding *the European Union* to reform their education, training and labor markets). Overall, the fieldwork led to over 2500 pages of notes and transcriptions, all interpreted in NVivo.

Broader Context Shaping VET in Romania

As in many European Union (EU) countries, VET is now high on the policy agenda in Romania as well. VET is called to meet different (and hard to reconcile) functions: from workforce replacement, economic growth and innovation, to poverty alleviation, social inclusion and increased unemployment. Its promotion takes place in a context of high pressure: from industry, from policymakers reacting to recent economic demand and from schools that need to fill the increasingly high number of places allocated to VET. New policy narratives and social marketing efforts aim to shift the established notions of VET as a route towards discredited blue-collar jobs. Policymakers, companies and schools promote VET intensively, in an effort to bring more young people onto this path. But the new policy commitment for 'more places' in VET makes this mission even more difficult, as the academic track, leading to a university degree, is more highly regarded. However, it has not always been this way. The country's relationship with VET has fluctuated.

Until the 1990s, Romania had a centralized economy, with full-time employment in industry the norm for those with VET. Communism put the image of the 'empowered' worker at the core of its political project. Various progression routes from school to work were created, and the advancement from apprenticeship status to 'meister' was highly regarded. The VET system of the Communist era in many ways resembled the current 'dual' model: stable partnerships between technical schools and industry, quality training placements that ensured gradual entry into work and binding employment contracts at the end. Newspapers of the time praised the practical skills and strong work ethic of 'meisters', and found the preparedness of university tech graduates for work in industry to be unsatisfying. The underlying ideological message was clear: the overconfident ethos of the working class vs. the political project of discrediting the 'elitism' of higher education. Admittance to the very few places that were on offer at university was, nevertheless, extremely competitive and highly prestigious.

For several years, the debate around VET in Romania revolved around the Communist past vs. 'the present'. However, 'the present' being referred to is a mixed period. For the past 30 years, both the economic context and the VET system itself have experienced many changes that have remained insufficiently accounted for. The process of de-industrialization, after the fall of Communism, made many full-time jobs in industry redundant. This led to large-scale dismissals, in a context of collective uncertainty, political turmoil and a lack of alternatives. The large underemployed population of working age (also due to a previous pronatalist policy) posed a political risk. Thus, labor migration after 2000 became both a policy strategy and a personal solution for navigating an unfriendly economic climate. Between 2000 and 2015, the country lost 7.3% of its total population annually to

¹ 'Meister' is the highest non-degree qualification in the area of vocational education and training and it entails 1–3 years of post-secondary education. The 'meister' role is a level 3 qualification (EQF level 5, ISCED level 4).

migration; that is, worldwide, the highest number of emigrants from a country not facing war, the first being Syria (UN, 2016). Major labor force shortages remained back home: from medical staff, to qualified workers. Social and emotional implications for the children 'left behind' added up (Vlase & Croitoru, 2019; Marcu, 2014, 2018). Many of those now in VET have migrant parents.

With a shrinking industrial sector unable or unwilling to support VET, and without a progressive economic strategy, VET remained obsolete and redundant. Some tentative reforms in early 2000 under PHARE, an EU pre-accession program, had no structural impact. A vicious cycle started to be created and the inflexibility of VET was one of the reasons for Romania's 'disappointing economic performance during the transition period' (Musset, 2013: 18).

Eventually, between 2009 and 2011, the Ministry of Education decided not to allocate any entry places to VET. This was a highly controversial decision, which marked a symbolic closing down of vocational education. Its echoes can still be felt, both within the political environment and the public consciousness. Young people wishing to continue their education, (otherwise mandatory until the age of 16) had high school as the only option. Yet, many young people from rural areas did not do so. A 1.5% increase in the dropout rate between 2009 and 2011 (Ministry of Education, 2018) can exclusively be attributed to this measure. Many young people were unable to meet the academic standards of high school, due to a low-quality early education, especially in rural areas. Furthermore, attending 4 years of high school in a city involved many hidden costs, which families were unable to afford. Aside from the implications for the young people themselves, the decision to end the VET system involved the physical destruction/disposal of equipment, repurposing of spaces etc. One could argue that the new project was removing the memory of the VET legacy altogether.

Many 'institutional factors' (Billett et al., 2022) and 'powerful elites' (Billett, 2011) were behind the decision to close the VET program. A claimed lack of demand from industry was used as a justification. Yet, a robust long-term vision over what VET could do was also missing. In the short term, teaching positions at high schools were at stake: an abundance of students was a temporary remedy to a demographic decline. Higher education – in particular, the mushrooming sector of low-quality, private universities, was considered, yet the main beneficiary of this policy. The political environment of the time encouraged the promotion of the *baccalaureate* exam, and enabled universities without good performance indicators to thrive, which led to the public discrediting of higher degrees. Short-term qualification courses then started to emerge, mainly based on European Union funding. A new layer of private VET providers was thus created, in ways that, to many, rendered 3 years of schooling futile.

Recent Developments

More recently, VET made a sudden re-entry into the public and policy arena, as Romania became an attractive destination for the production lines of major industrial players. Automotive and textile outsourcing factories with low added value were rapidly opened in the proximity of small towns and suburbs. A thriving retail sector responded to the increased consumption, whilst the construction sector saw significant expansion. The economic growth was unprecedented in Romania's recent history. The high demand for qualified workers to fill positions at the very base of the occupational pyramid started to co-exist with a phenomenon of overqualified young people occupying mid-level positions, where a university degree was not necessary.

Companies first faced a skills replacement crisis and then, a high employee turnover, as salaries for workers hardly went beyond the minimum income and the prospect of migration was always present. Employee poaching was the norm. Faced with major demographic changes (retirement of the main cohorts of qualified workers and skills drain), industry leaders started to lobby for VET. Foreign chambers of commerce and business clubs were at the forefront of this process. Their powers of persuasion were so strong that, according to policy stakeholders involved in the early consultations, the proposal was for just 2 years of VET, with very little general education. However, with very few exceptions, companies were reluctant to commit to a dual system: providing quality work placements and supporting young people financially (50 USD/month) were considered 'risky' investments. At stake was the possibility that the trained young people might go to work for another company or migrate, but there was also the possibility of company relocation. Besides, employing more semi-skilled workers was always a cost-effective measure, as salaries were low.

In 2014, VET was re-introduced in an expedited format, and young people with the lowest grades from several technological high schools (Grade 9) were allocated to VET classes after their first year. From 2015, a 3-year VET path was available to those completing eight grades (aged 14). This is the cohort the current research tapped into. They were young people entering VET in the absence of VET models among their peers.

Education is mandatory until 10th grade. The first selection process takes place at the end of grade 8, when, based on national examination scores, young people may opt for high school (4 years) or VET (3 years). High schools lead to higher education, although some progression routes are – mainly in theory – available for those in VET as well. High schools may have a focus on the humanities, science or technology, but there are not many options for VET. In practice, some 'technological colleges' have one or at most two VET classes, alongside a majority of high school students. The work placements are of mixed quality, depending on the surrounding economic environment.

292 M.-C. Pantea

Since 2017/2018, some large companies have started to work with schools in a dual format, a process that has long been pending on the policy agenda.² Many companies with strong industrial sites in Romania were interested in contributing towards dual VET, in order to attract and train their future qualified workers. Policy endorsement was high and marketing strategies were in place. For the school year 2020/21, almost 5% of the places in grade 9 were in dual VET (CNDIPT, 2020), although not all were taken. European funding is expected to support companies in accommodating the training needs of the young people in VET (European Commission, 2019a). Indeed, the National post-Covid Recovery and Resilience Plan (a facility of the European Commission), has the support of institutions (companies and schools) for providing dual VET as a priority. In the main, governmental/ European funding will cover the acquisition of equipment and training of personnel. This is a major boost, as public expenditure on education has been one of the lowest in the European Union for decades. The funding for non-dual VET, where the overwhelming majority of young people are, remains extremely low.

Endorsement of VET makes for good PR and is used as an indicator of corporate responsibility. This explains why 'investment' in VET is also used as an influential tool to project a positive image of companies with a record of irresponsible behavior and even fraud. It is not always the case that companies doing the most for VET are the ones that receive media attention. A closer examination of the actual scale of support by some outspoken companies involved in the public debate, indicates a bewildering inconsistency. For example, a major player in the oil industry offers substantial scholarships for several students in VET, yet at the very same time, it dismisses a high number of workers. An otherwise minor investment in VET is also used as a front by a major company engaged in significant, illegal deforestation in Romania and by a chemical plant notorious for its non-compliance with the standards for air quality. For these employers, VET seems to carry a valuable symbolic capital.

VET Structure and the Young People It Serves

Upon completing 8 grades, young people take a standardized national examination and choose between a short VET program (or *initial VET* of 3 years, leading to European Qualification Framework – EQF level 3 qualifications³); a long VET program (4 years of high school in a specialized field, leading to EQF level 4 qualifications⁴ as 'technicians') or 4 years of high school in an academic, artistic or theological field. The education provided by the age of 14 prioritizes academic

²The first (and still the only) independent dual school was established in 2012. It was a rather isolated initiative, strongly endorsed by the German business community from a highly industrialized city.

³ ISCED-P 352.

⁴ISCED-P 354.

disciplines and leaves little space for practical or technical knowledge. This deprives young people of accessing a wider array of disciplines and, obviously, of developing VET inclinations. High school education becomes the norm. It is finalized with a national exam (the *baccalaureate*), which is mandatory for university admittance. The success rate at the *baccalaureate* works as a strong indicator of quality and prestige for all high schools.

To a certain extent, the name 'VET schools' (rom. *scoli profesionale*) is misleading. In practice, they consist of several classes situated in (technological) high schools. When deciding whether to set up VET classes, schools have to balance the image risk of having a low success rate at the *baccalaureate* for their high school classes on the one hand, and the low prestige associated with VET on the other. In any case, there are only a very small number of VET classes, with 1–2 per technical high school (if at all). Long term VET programs (at the upper secondary school level) are – technically – included in the VET statistics, as they lead to the EQF level 4 'technician' qualification. However, in the public perception, they are closer to academic high schools, as they can provide a direct route to higher education. This chapter is concerned only with the *initial VET*: the short-term program of 3 years.

VET students receive an equal amount of general education and training. But company representatives who were interviewed in Romania were overwhelmingly in favor of more time allocated to practice; the teachers themselves, and the students, were often of the same opinion. The presence of academic disciplines is marginal, and their relevance is disputed in informal conversations at all levels. There are, for instance, very few VET textbooks for non-technical disciplines, such as Romanian literature/history or foreign languages. Thus, despite the existence of some 'progress routes' to high school,⁵ the actual likelihood of passing the equivalence tests required is structurally undermined. As students in VET have a severely underdeveloped curriculum in academic disciplines, and often low levels of academic achievement, high schools are reluctant to accept any transfers from the program. The perceived risk of spoiling their already frail *baccalaureate* statistics ranks high.

All VET students receive a monthly stipend of approximately 50 USD, subject to school attendance. That amounts to 15% of the net minimum income guaranteed. Schools are responsible for securing work placements in local firms. The VET schools vary enormously, with their success depending mainly on the local economy and the capacity of their leadership to secure reliable links with the business sector. More robust partnerships with larger companies are likely to emerge under the dual system and in the large cities.

Over 40% of Romania's population has always been concentrated in rural areas, with all the limitations that entails: from lower education levels, to poor employment options, an underdeveloped infrastructure and demographic aging. Whilst most young people in VET reside in rural areas, there are very few VET schools

⁵Upon completing the 3-year VET program, graduates can enroll in the third year of a technological high school (EQF level 4 technological program).

294 M.-C. Pantea

located there. Upon completing the 8 school grades locally, young people then have to commute to the towns and cities nearby. But many do not do so. VET school information teams are often proactive in reaching these young people. Depending on a school's resources, the teams are made up of teachers, pupils and company representatives, who organize meetings with parents in the countryside, in order to promote VET. Those entering VET do so in circumstances that are very loosely connected (if at all) to their envisioned occupational future. This research confirms previous findings (Webb et al., 2015; Brown, 2017), that young people in Romania too, 'end up in VET' for very pragmatic reasons, some far removed from the world of work. Proximity to home ranks high, and the tendency for rural students to 'choose' the VET school that is closest to a railway or the bus station was repeatedly reported in our research.

Many young people included in the current research were thinking about the possibility of shifting to a different occupation, after completing their 3 years. Whilst concrete numbers are difficult to advance, the expectation of working in a different field was overwhelming for those in textiles and forestry. Migration (and its perceived 'opportunities', unrelated to VET) was influential in shaping young people's openness in relation to their future occupation. Often, the short-term qualification courses seemed a solution at hand. Some are funded through EU support mechanisms, such as the European Social Fund. Interviewees' accounts suggest that they largely accepted the idea of transfers across occupational groups, but also that VET students had a built-in sense of 'not being in the right place'. Importantly, research (Sikora, 2018, cf. Billett et al., Chap. 6) suggests that while uncertainty is not an issue for university students, it is a problem for VET, as these courses are very occupationally specific (Billett, 2020). Yet, the old argument about the undemocratic structure not allowing VET students to enjoy 'exploratory experiences' in the same way as their peers, may still be pertinent (Thompson, 1973).

The quality of the training in VET – including on the dual track – is very unbalanced. The school *meisters*⁶ are approaching the end of their careers and are farremoved from recent industrial developments. Companies, on the other hand, have, to varying degrees, the capacity/readiness to delegate workers who are able to guide the young people, as they often have to comply with high productivity demands. Indeed, interviewed young people described a mixture of relationships at their work placements: from quality mentorships (being 'taken under a *meister's* wings') to less structured situations of being relegated to unqualified tasks in the name of safety, to avoid interference in the *modus operandi*, to ensure production targets were met or simply out of personal choice. The dual system allows the young people to learn from properly trained staff during their work placements, thereby addressing the issue of out-of-touch teachers at the technical schools.

⁶ 'Meisters' are specialised technicians with previous experience in industry, who teach in VET. Increasingly, they are being replaced by engineers (or are required to gain an engineering degree).

What Makes the Promotion of VET (so) Difficult?

There are several factors that make the promotion of VET extremely complicated in Romania. To start with, Romania is (yet another) country where the 'source of the demand' rarely comes from young people and their families. As argued in Wallenborn and Heyneman, this is, indeed, a problem that may lead to 'inefficient modes of organization' (2009: 412). There is a strong sense of anxiety in relation to VET in Romania, and large companies have been extremely proactive in instilling a sense of urgency. Claims that major industrial players had decided to limit their activities, or were considering relocating, were part of a powerful 'skills crisis' narrative, which policymakers maintained.

There is also a certain amount of politics involved in the way companies participate in the consultative processes on VET. Despite state firms being the largest employers in Romania, the companies that had a voice in shaping VET were overwhelmingly from the private sector and mostly international. The small and medium-sized firms, representing over 99% of registered enterprises, and hiring over two thirds of Romania's employees (EC, 2019b), were not markedly involved in framing the VET policy. The disregard for the public sector as the source of stable jobs is not a regional deviation and is not without controversy (for a discussion on the pejorative rhetoric of the 'suffocating role of the state' vs. the 'flawed moral economy' of the free market, see Stuart et al. 2013).

At the other end of the spectrum, young people's preference for higher education is a more global tendency (Billett, 2020; Billett et al., Chap. 6) and Romania is no exception. As elsewhere, higher education has become the middle-class norm and is an achievable goal for ordinary people. But this is not independent of 'institutional factors' (Billett et al., 2021). Public investment in higher education is much greater than in VET, and there is a policy of increasing the numbers of people in higher education, in order to compensate for the country's historic deficiencies. The development of the university system over the last 30 years has unleashed an overwhelming trust in its ability to prepare students for white-collar jobs. Credential inflation has led to greater pressure for university studies, yet they are of mixed quality because of a very lax and (arguably politicized) accreditation policy. Yet, as elsewhere, degrees devalue fast and many graduates have started to 'colonize' labor market areas previously occupied by non-graduates, such as those with VET (Tomlinson, 2010; Collins, 2002).

The return to the value of trades and a preoccupation with *materiality* (as opposed to the 'elusiveness' of academic disciplines) has started to shape new cultural norms, but only in regard to 'other people's children' (Wolf, 2002). A more general anxiety

⁷During Communism, the very low number of places allocated to higher education was a political project. Now, Romania still has one of the lowest percentages of its population with tertiary degrees. Although as little as 20% of each young generation graduates from university, the educational system is built in a way that channels its energy towards higher education as a goal (Federatia Coalitia pentru Educatie, 2018).

over young people's 'unreasonable aspirations', related to university degrees without clear labor market outcomes, has started to build up. Tacit concerns over underemployment (by overeducation) have emerged. This has unexpectedly helped build the case in favor of VET, as a reaction to a perceived failure of the higher education promise. Indeed, when interviewed, the young people had internalized the debate about the advantages, built around the usefulness of high school and higher education. Both were considered risky investments and led to being overqualified:

What's the point of going to high school and even to university if you really don't know how to do anything? Many are proud of that, but in the end, they work in a supermarket or something like that. (Anita, Grade 10, textile class, large city)

As elsewhere (McGrath, 2012; Powell, 2012), VET is expected to perform an important social inclusion function as well (it is also part of Romania's strategy of poverty alleviation). As well argued by Atkins (2010), young people in VET are often drawn from lower socio-economic strata, have a history of low achievement in school, and exhibit other characteristics associated with social exclusion (2010). The contemporary perceptions of VET (in policy and in the public discourse) are informed by this deficit model and condescending social inclusion concepts. The stipend, which is not related to individual need, is part of this mindset. Whilst, indeed, the money is a financial help to many young people in VET, interviewees also felt there was an element of social stigma attached to it, as peers from high school tended to associate VET with short term aid. Many young people in our research appeared preoccupied with activating coping mechanisms, in order to accommodate their marginal status.

According to the interviewed school inspectors and company representatives, parents tended to associate VET with the dirty and demeaning industrial work of the Communist era. The collapse of industry and the disorientation that followed, as well as the disdain for the working conditions of the time, are still present in the collective memory. Although parents of those now in VET are less likely to have experienced factory work in the Communist era themselves, a sense of concern in relation to industrial work is alive and well. Grandparents may be the main actors in infusing 'secondary nostalgia' (Velikonja, 2009), but also a sense of skepticism in the value of industrial qualifications. Companies started to tackle this cultural inertia and sense of reluctance by organizing site visits for parents. Very few showed up.

As career counseling is severely underdeveloped, the stance of teachers on VET is often key. This research was, however, an opportunity to discover how marginalized they feel. In the interviews, many teachers displayed their skepticism, policy fatigue and low trust in their collective capacity to influence meaningful change in an education system that appeared chaotic and underfunded. At the same time, counterarguments emerged over conventional VET prioritizing teachers' jobs at the expense of updated qualifications (Federatia Coalitia pentru Educatie, 2018). To many recent players in the VET reform (notably stakeholders from the private sector), this was a major barrier to structural reform. At the time of carrying out the research (2017–2018), schools were being restructured, merged or faced the prospect of closure. Many were very proactive in promoting their 'offer' and tried to

navigate sometimes intricate economic environments, to secure good placements for their students. The sense of precarity and crisis was palpable, both for the tenured and the non-tenured teaching staff.

With a very high rate of functional illiteracy, Romania can hardly make a case for quality VET. Young people often arrive with major shortcomings from earlier education cycles. Thus, VET schools are often caught between remedial learning and progressing with the VET curriculum. Although school attendance and the dropout rate have long been on the public agenda, the current situation of Romania's VET has brought the role of quality education to the fore. Young people *do* attend school, as the monetary stipend is conditioned upon attendance. However, the quality of the education is often closer to the World Bank metaphor of 'schooling without learning'. In many ways, Romania's VET schools are going through a 'learning crisis', 8 with many students facing severe socio-economic problems, or coming from rural areas with poor quality schooling. They are also a reflection of an education system that has been historically underfunded and where teacher training ranks low. Thus, the impasse of VET unfolds as more than an 'image problem' that calls for a make-over. What is needed is robust reform across the entire educational spectrum.

Promotion of VET: Structural Measures and Positive Metaphors

Romania is in the process of (re)instating VET as an attractive prospect, in a context of high public endorsement around the need for VET reform. This is neither easy nor dilemma-free. How policymakers, the public and teachers regard physical work, matters for how VET schools are perceived. The next sections will firstly describe the measures taken at a structural level to re-instate the attractiveness of VET. Then, they will explore the efforts made by schools to recruit students and create a positive narrative around VET.

The promotion of VET is based primarily on structural policy measures (e.g., a governmental commitment to increase the number of places, the legal framework for dual VET, the monthly scholarship), coupled with strong media visibility of the economic demand. They shape a public ethos likely to favor hands-on occupations and which, indirectly, links the low engagement with VET to the 'unreasonable' career expectations of the parents. The actual quality of the learning, and the jobs available upon completing VET, are missing from the debate. Although VET has progression routes to higher education, the policy and media discourses still have a built-in 'either-or' narrative. The assumption legitimizing this approach is that the groups VET taps into are less likely to have higher aspirations, or to meet satisfactory performance criteria. Indeed, this is most often the case, in a country with disconcerting levels of functional illiteracy (42% among young people under 15 cf.

⁸A World Bank (2018) concept for describing a multi-faceted global phenomenon.

298 M.-C. Pantea

OECD 2014). The promotion of VET builds on short-term personal goals that prioritize earning to learning, with poor appreciation of longer educational paths.

Media is a powerful tool for promoting VET in ways that are appealing and have a strong novelty bias. For instance, marketing based on illusory and appealing images of highly technical work, that associates VET with innovation and cutting-edge equipment, is frequent, but has little resemblance to what is actually being offered in most VET schools. The new stakeholders involved in shaping the VET reform, promote powerful media discourses on occupations in high demand. The narrative on high incomes for welding or plumbing (the 'working rich' according to Warren, 2016), and the images of 'masculine' and 'high tech' occupations, are rarely accompanied by the fact that the highest percentage of VET places are in mechanics (17.798), hospitality and commerce (11.668), and textiles (3.031) (CNDIPT, 2020).

The difficulty for young people in attaining a labor market position that is, indeed, rewarding and able to meet their expectations of personal and professional growth, remains overlooked. Asked how many workplaces they expected to have before retirement, the overwhelming majority of young people declared they expected 2–3, or even one, if they 'like the first place from the very beginning'. The idea that they would move from one precarious job to another, in a semblance of career progression, was outside their imaginations, as many shared the belief that they would have 'good jobs'. The discrepancy between the concrete possibilities available after completing VET, and the policy rhetoric, remains an unresolved tension.

Elsewhere, the 'selling' of education and training is considered prone to fail if people 'have any inkling' (Keep, 2009, p. 40) that initial VET can only just lead to poorly paid, low-skilled work with few, if any, opportunities for progression. As argued in Foster's analysis of the 'VET fallacy' in Ghana, the jobs that are central to the debate about vocational orientation are very important, as their perceived status is very much dependent on the reward structure and the occupational hierarchy. To him, VET schools can do little to change the career interests of young people and their parents, and any attempts to use the curriculum to change attitudes towards an occupation are 'ineffective and economically wasteful' (1965, p. 275).

Whilst acknowledging the geographical and historical distance from Foster's theory, one can identify the same dilemmas in many VET schools in Romania today. Faced with the need to maintain their teaching staff, with poor investment in infrastructure and the bureaucratic difficulty of changing their profiles, schools promote a positive image of jobs that are otherwise precarious. Interviewed young people were thus faced with an unresolved tension between tropes of respectability, as proposed by school 'meisters', and the actual employment available.

One case in point is the recent history of textile VET. During the 1990s and early 2000s, several developing regions of Romania became attractive sites for offshore textile companies, making the demand for labor very high. Yet, it soon became clear that textile work was precarious employment. In order to increase recruitment by turning to 'untapped groups', textile companies started to pressure VET schools into establishing textile classes. The policy thinking contributed to the belief that it

was within the schools' powers to reshape young peoples' attitudes towards different kinds of work and employment. Whilst VET schools can indeed be instrumental in creating a positive image about (otherwise) precarious occupations, young people and their parents still seem to know which VET profiles lead to good jobs and which do not.

One interviewed school director explained the pressures her school faced. To her, there were 'thousands of vacancies in the textile industry' because 'nobody wants to do that work'. She recalled an exceptionally tense meeting with textile employers, who blamed the VET schools for offering 'as few as 40 places in the county, when they need thousands'. She knew all too well that without a consistent push, as much as half a class would remain unfilled (putting the school at risk). Countrywide, VET programs in the textile industry still have one of the highest numbers of students, but schools go to great lengths to recruit them. In the meantime, as production costs in Romania have increased, clothing manufacturers have started to relocate, leaving a bad taste over textile work and textile VET.

VET schools have started to operate with a market-like logic: with proactive recruitment campaigns and occasional clashes between schools 'fishing in the same pool'. Their ability to recruit is highly dependent on location (notably rural young people willing to commute), on the alternatives available at other schools and on the local economy. When foster care institutions are nearby, profiling for VET becomes the norm (Pantea, 2019a). For the dual schools, it is professional marketing by companies that makes the difference. Otherwise, the 'hunt for students' can involve very personal efforts, including visits to the countryside by school principals in order to persuade young people and their parents, even on an individual basis, that VET is a reasonable option.

VET schools play the personal autonomy card as their 'marketing' strategy. With pressing family needs and job prospects unable to break the poverty cycle, one can question the legitimacy of subjecting (otherwise disadvantaged and vulnerable) young people to the powerful discourse on VET as a route to financial autonomy. Furthermore, in an unprecedented shift (at least for Romania), VET schools seem to capitalize on young people's 'agency' and to actively endorse parents' weak involvement in their children's educational choice:

Children want VET. And the parents end up leaving them to choose. They see the children don't want to learn, don't want to go to high school or keep on studying. So, the parents let them work, they let them come to VET. (VET School principal)

Asked if they had a particular talent, or if they felt confident about being able to do something really well, many young people seemed in the midst of a dilemma. The majority of those interviewed ended up in VET against their will, with a remote understanding of their field. Some even recalled a process loaded with confusion that ended in VET: 'I ticked so many boxes, I don't remember them all'. Yet, once in VET, their perceptions started to diversify. For many, the field that unfolded seemed appealing and motivating enough to allow them to envision themselves working in that trade. Roughly a third of the young people stated that once in VET, their notion

300 M.-C. Pantea

of what it actually entailed changed for the better. For many, the complexity of the new area generated a comforting sense of competence:

Ramona: All I knew was that I come, I take the order, I bring the meal. That clients pay and then they leave. But everything is extremely complex.

I: So, it's different from what you guys initially thought?

Olivia: Definitely, even the way you hold your hands matters.

I: Really?

Olivia: Yes. We love it!

Ramona: Especially when we do the practice! It's so cool! (Focus group, VET hospitality, small town, grade 10)

Sometimes, young people develop strategies that enable them to come to terms with their status, while removing any concern over 'what the occupation is about'. Below is an account of a girl from a forestry class, who changed her VET school from hospitality to forestry after moving in with her boyfriend in a nearby town. Her mother was working temporarily in Italy, without Maria seeming aware of her location or actual occupation. Her male colleague from the countryside seemed equally detached in regard to the VET qualification and echoed Maria's Goldilocks-like view:

I: What attracted you to this job?

Maria: It seemed neither too hard, nor too easy. In other schools, it was too easy, and teachers did not care, or it was too hard and, gosh, you had so much to learn! Here, it's just perfect: not too hard, not too easy.

I: What will you work as when you finish this school? What are you going to be?

Maria: Not really a ranger, as I understand it....

Gabriel: We will have a diploma that we completed at our VET school and we will be qualified in the forestry field.

Maria: And we'll be able to work with the rangers, to help. And do our own job. I mean a part of it.

I: So, what could you do when you're done with school? I'm asking you honestly, as I don't really know...

Gabriel: Well, when we're done here...

Maria: We can work at the Forestry Authority.

Gabriel: But not like technicians, cos those would be the rangers.

I: And would you do fieldwork?

Maria: Yeah, we'll go out into the field.

Gabriel: Right!

I: What do you think you will not like about this job?

Gabriel: One thing we won't like... I don't think there is such a thing.

I: No?

Maria: It's all a pleasure. (Focus group, VET forestry, grade 10).

Maria and Gabriel did not even know about the existence of a VET profile in forestry, and they did not indicate any pre-existing attraction to this field. How do their coincidentally discovered predispositions fit with the idea of a vocation (imagined as a long-term, sustained inclination)? Research suggests that only the individual can decide what his/her calling is; yet, individual choices are mediated by institutions using raw facts, which may ultimately shape what young people consider to be their vocation (Dewey, 1916; Billett, 2011). It follows that vocations are manifestations of agency, yet they are socially enabled and constructed. Accordingly, we should not deny young people in the above situations, the opportunity to realize their vocation. Yet, strong statements need to be viewed with caution, as the risk of oversimplifying complexity is high (see the situation of the young people from foster care who are habitually persuaded that the local VET classes offer very good opportunities).

When carrying out interviews with young people and teaching staff, it was noticeable how a belief in the 'value of VET' was instilled top-down, as we recognized the same tropes in the words of both students and teachers. Schools (especially 'meisters' and technical education teachers) seemed particularly influential in instilling a positive stance on VET, which builds upon a twofold view (Pantea, 2019b). On the one hand, it emphasizes the swift entry into the workplace through VET; on the other, the uncertain work prospects through high school. Different schools appeared to have different ways of infusing a positive mindset on VET: by strengthening the value of the certification, by focusing on practice, by presenting the occupation as 'in demand' abroad and/or by underplaying the relevance of high school (when not linked with realistic prospects of higher education). Given the strong migration trends, the demand for VET in Romania is often considered in relation to the European labor market. The prospects of (precarious) migration are always present for those in VET.

Young people appeared engaged in considerable 'identity work', with elaborate thoughts on their status in VET and imagined occupational trajectories. As with the study by Bathmaker (2001) in the UK, the interviewed young people in Romania displayed optimism about the possibility of finding decent employment, as they conflated 'good' qualifications with 'good' jobs. And even when qualifications were not considered promising, schools appeared very efficient at creating a positive narrative on VET as 'the right place' for their students. Many students articulated alternative views on, arguably, dead-end VET schools: *I also didn't know a thing about this job and believed at the beginning that it was ridiculous. But it is not that way at all* (Irina, VET hospitality, grade 10). Views of this kind may contradict the idea that the image of VET is dependent on the 'societal esteem' (Billett, 2011) attached to an occupation.

Yet, the conclusion that VET schools are able to interest (previously) disengaged young people in a trade, should be viewed with caution. In the final analysis, we tend to believe that students' positive stance on precarious occupations is a short-term plan, transferred uncritically to highly disadvantaged young people, who felt they had no other choices in life when entering VET (Brown, 2017). The fact that many respondents came from foster care or were from families with marginal, non-standard employment, further substantiates this argument and raises ethical dilemmas. Too often, 'profiling' for VET, and the prioritization of institutional and economic goals, replaces an informed and youth-centered career-counselling.

Dual VET and the Social Inclusion Dilemma

As in other countries (see Lehmann & Taylor, 2015), there is a growing consensus in Romania that Germany's dual system is a point of reference for VET reform. It has been proposed as a 'model for other countries' (Euler, 2013; Euler & Wieland, 2015), it has been intensely promoted, and it has met with high policy recognition within the European Commission. Although research suggests caution when it comes to promoting the dual model as good practice, irrespective of country-specific social subsystems (Euler, 2013; Lehmann & Taylor, 2015; Billett, 2011; Wiemann, 2017), the German system has been important in shaping the VET policy in Romania.

In 2018, a national Authority for the Dual System was established, directly answerable to the Government. Its aim is to coordinate the needs of the labor market, with what is being delivered by the education system, and it puts the interests of companies at its core. The National Center for VET, established 20 years ago, has also remained in place within the Ministry of Education, to manage the non-dual system. Legitimate questions about the rationale for not incorporating schools-based VET into the same agency, have been insufficiently explained, apart from the suggestion that 'there was no will to do so' (Federatia Coalitia pentru Educatie, 2018). The implications for the non-dual system are not touched upon in the public or policy discourse.

Several structural preconditions are needed: strong cooperation between the Government and employers (e.g., in relation to curricula, certification of competences, co-funding); a willingness by employers to provide training in accordance with the curricula, governmental provisions, and a favorable reception from young people and their parents (Eichhorst et al., 2015). In Romania, this type of cross-cooperation is rather recent, and institutional partnerships take time to materialize. The number of companies initiating partnerships with schools is rising, but it is still very low. The reasons for this are manifold and – for the time being – can only be guessed at: they range from an unstable fiscal environment and unfavorable costbenefits analyses, to fears of poaching, resistance by schools, and the general unattractiveness of VET for young people and their parents. For a long time, companies made do with in-house training and employed low wage workers. Their long-term commitment to dual VET is also uncertain.

The recent developments in Romania's dual VET show that in time, this model may become increasingly selective and likely to function using a 'market' logic, that taps into the selection pool for high schools, rather than that of the conventional, schools-based VET. The strong marketing efforts used are sometimes able to attract young people who would otherwise consider high school. The risk that dual VET won't be a vehicle for social inclusion is not something new. Elsewhere, it has been argued that the dual system has built-in selectivity and a risk of exclusion, with many young people unable to pass the selection standards set by companies for enrolling into VET after lower secondary school (Masdonati, 2010). Many others leave VET without a professional qualification (Wieland, 2015). Young people's

own preferences may also not be reflected in the qualifications on offer, as they are tailored to what the market deems necessary (Wieland, 2015). The dual system holds some promise, but it rarely includes the 'hard to reach' young people. Ultimately, it seems clear that in Romania, the under-reformed schools-based VET system will not meet similar ends. The VET system thus needs a more refined understanding of what social inclusion demands.

Final Note

One year after the fieldwork, in 2019, interviews at unemployment offices continued to confirm the invisibility of those who were either in, or who had completed, VET. From school principals, to employers and policymakers, the young people in VET were the 'missing middle', even in places where one would least expect it. Employers were likely to speak about young people in general and less about those with VET. They appeared 'not to see' young people with VET as a group who were either qualified, reliable or available to take the jobs 'on offer'. Some wondered whether VET schools had, indeed, been reestablished. Even during interviews with school principals, there were instances where the researcher had to remind them, or ensure that the dialogue was, indeed, about the young people in VET, and not about those in high school. One unemployment office we visited, posted jobs requiring level 3 qualifications alongside those for unqualified workers. In another place, young people just completing VET might have been eligible for fewer than 1% of the vacancies. In one major city, calls to make young people register as unemployed were highly unsuccessful, despite financial incentives attached to the registration. It seems that a large number of those finishing VET were neither in employment, nor in school, nor registered as unemployed. The assumption shared by staff at the employment offices was that 'somehow, these young people find their way' by migrating or doing odd jobs. Individual responsibility was implicit in the 'official' narrative on young people and was used to legitimize the absence of meaningful supportive policy measures.

Up to the Covid-19 crisis, the work of recruitment teams in all fields was stretched to the limit. Companies tried to make do with in-house training, poaching and by bringing in workers from outside. Under pressure from the main industry players (in particular in the hospitality sector), new legislation and country migration quotas were changed, to enable the increased employment of migrants from third countries. Companies started to consider this possibility more seriously. As of 2020, employers expect that the Covid crisis will bring back the skilled workers who migrated. Anecdotal evidence, however, suggests this is less likely to be the case, as the most skilled are also the most resilient in times of adversity. The interest in VET remains limited, with only very local success stories. In one county, out of almost 4000 students completing the 8th grade in the summer of 2021, only 70 opted for VET (including dual), according to AGERPRES (2021). Occasionally, information on young people's increased propensity to migrate to Germany, to work in factories,

304 M.-C. Pantea

abattoirs or in the courier services when they turn 18, is reported in the media and is attributed to the failure of the education system during Covid-19 (Bălășoiu, 2021).

As this chapter has suggested, the promotion of VET does not start with schools, but with a government commitment to create links between institutions and stakeholders. As argued by Kalleberg (2013), the notion of good jobs is a normative construct that is gendered, contested, fluid and evolving. It depends on the 'characteristics' of both people and jobs. Against this backdrop, it might be worthwhile to question the pertinence of VET in its current format. It may be that – despite the apparent policy zeal – level 3 qualifications, as currently provided through schools-based VET, are not a strong enough basis to maintain the interest of employers and schools. Further research is needed to move the focus to the companies themselves and explore how they can function with or without VET.

Romania needs a revived vision for VET, in ways that take into account the responses it can bring to current social and economic problems, such as climate change and the need for innovative solutions. It has to overcome, as argued in McGrath (when discussing the Global South), the 'productivist' ethos that is short-term, focused only on employment, individualistic and neglectful of human development (2012). For the time being, Romania's VET sector is still far from innovation, digitalization, skills forecasting, and concepts such as sustainability and 'greening'. VET remains highly dependent on a political economy where the search for high added value is more likely to be the exception than the rule. The promotion of VET among young people is tackling the first layer, rather than opening up a discussion over what VET is for (Billett, 2011) and how the interests of young people are being served, ignored or even misused when the institutional or economic priorities of the moment take priority.

References

AGERPRES. (2021). Doar 70 de elevi absolvenți ai clasei a VIII-a au optat pentru învățământul profesional și dual. https://www.agerpres.ro/educatie-stiinta/2021/06/22/bihor-doar70-de-absolventi-de-clasa-a-viii-a-au-optat-pentru-invatamantul-profesional-si-dual%2D%2D734889

Atkins, L. (2010). Opportunity and aspiration, or the great deception? The case of 14–19 vocational education. *Power and Education*, 2(3), 253–265.

Balasoiu, F. (2021). Elevii care au picat BAC-ul vor să muncească în Germania, în fabrici, ori să fie curieri. Sunt recrutați imediat după școală. PRO TV. 20.08.2021.

Bathmaker, A.-M. (2001). 'it's the perfect education': Lifelong learning and the experience of foundation-level GNVQ students. *Journal of Vocational Education & Training*, 53(1), 81–100.

Billett, S. (2011). Vocational education. Purposes, traditions and prospects. Springer.

Billett, S. (2020). Perspectives on enhancing the standing of vocational education and the occupations it serves. *Journal of Vocational Education & Training*, 72(2), 161–169.

Billett S. et al. (2021) Remaking and Transforming Cultural Practices: Exploring the Co-occurrence of Work, Learning, Innovation: Creativity and Learning. In S. Lemmetty S, K. Collin, V. P. Gläveanu, & P. Forsman (Eds.), *Palgrave Studies in Creativity and Culture*. Palgrave

- Billett, S., Dymock, D., Hodge, S., Choy, S., & Le, A. H. (2022). Chapter 6: Shaping young people's decision-making about post-school pathways: Institutional and personal factors. In S. Billett, B. E. Stalder, A. Vibe, S. Choy, S. Hodge, & A. H. Le (Eds.), The standing of vocational education and the occupations it serves: Current concerns and strategies for enhancing that standing. Springer.
- Brown, J. (2017). In their words: Student choice in training markets Victorian examples. NCVER. CNDIPT. (2020). Peste 96.600 locuri disponibile în învățământul profesional şi tehnic pentru anul şcolar 2020–2021. https://www.alegetidrumul.ro/noutati/peste-96600-locuri-disponibile-in-invatamantul-profesional-si-tehnic-pentru-anul-scolar-2020-2021
- Collins, R. (2002). Credential Inflation and the future of Universities. In S. Brint (Ed.), *The future of the city of intellect: The changing American University* (pp. 23–46). Stanford University Press. Dewey, J. (1916/1966). *Democracy and education*. The Free Press.
- Eichhorst, W., Rodríguez-Planas, N., Schmidl, R., & Zimmermann, K. F. (2015). A road map to vocational education and training in industrialized countries. *ILR Review*, 68(2), 314–337.
- Euler, D. (2013). Germany's dual vocational training system: A model for other countries? Bertelsmann Stiftung.
- Euler, D., & Wieland, C. (2015). The German VET system: Exportable blueprint or food for thought? Bertelsmann Stiftung.
- European Commission. (2019a). *Education and training monitor 2019. Romania*. Publications Office of the European Union.
- European Commission. (2019b). SBA fact sheet Romania.
- Federatia Coalitia pentru Educatie. (2018). Conferința Națională în Domeniul Educației, ediția a IV-a. http://coalitiaedu.ro/pozitii-publice/momentul-critic-alinvatamantuluiprofesional-din-romania/
- Foster, P. (1965). The vocational school fallacy in development planning. In A. A. Anderson & M. J. Bowman (Eds.), *Education and economic development*. Aldine.
- Kalleberg, A. L. (2013). Good jobs, bad jobs. The rise of polarized and precarious employment systems in the United States, 1970s to 2000s. Russell Sage Foundation.
- Keep, E. (2009). Internal and external incentives to engage in education and training: A framework for analyzing the forces acting on individuals? (SKOPE Monograph 12). ESRC Centre on Skills, Knowledge and Organizational Performance.
- Lehmann, W., & Taylor, A. (2015). On the role of habitus and field in apprenticeships. *Work, Employment and Society*, 29(4), 607–623.
- Marcu, S. (2014). Mobility and identity in a wider European Union: Experiences of Romanian migrants in Spain. *European Societies*, 16(1), 136–156.
- Marcu, S. (2018). Mobility as a support strategy: Linked lives through the life course among Eastern Europeans in Spain. *Geoforum*, 97, 335–342.
- Masdonati, J. (2010). The transition from school to vocational education and training: A theoretical model and transition support program. *Journal of Employment Counseling*, 47(1), 20–29.
- McGrath, S. (2012). Vocational education and training for development: A policy in need of a theory? *International Journal of Educational Development*, 32(5), 623–631.
- Ministry of Education. (2018). Raport privind starea învățământului preuniversitar din România 2017 2018. https://www.edu.ro/sites/default/files/Raport%20privind%20starea%20 învățământului%20preuniversitar%20din%20România_2017-2018_0.pdf
- Musset, P. (2013). OECD reviews of vocational education and training a skills beyond school commentary on Romania.
- OECD. (2014). PISA 2012 Results: What Students Know and Can Do Student Performance in Mathematics, Reading and Science, 1. Paris: PISA, OECD Publishing.
- Pantea, M. C. (2019a). Perceived reasons for pursuing vocational education and training among young people in Romania. *Journal of Vocational Education & Training*, 72(1), 136–156.
- Pantea, M. C. (2019b). Precarity and vocational education and training. Craftsmanship and employability in Romania. Palgrave.
- Powell, L. (2012). Reimagining the purpose of VET Expanding the capability to aspire in South African Further Education and Training students. *International Journal of Educational Development*, 32(5), 643–653.

Sikora, J. (2018). Aimless or flexible? Does uncertainty in adolescent occupational expectations matter in young adulthood? *Australian Journal of Education*, 62(2), 154–168.

- Stuart M. et al. (2013) Reflections on work and employment into the 21st century: between equal rights, force decides. *Work, Employment and Society*. 2013, 27(3), 379–395.
- Thompson, J. F. (1973). Foundations of vocational education: Social and philosophical concepts. Prentice-Hall.
- Tomlinson, M. (2010). Investing in the self: Structure, agency and identity in graduates' employability. *Education, Knowledge and Economy*, 4(2), 73–88.
- UN. (2016). International migration report 2015 highlights. http://www.un.org/en/develop-ment/desa/population/migration/publications/migrationreport/docs/MigrationReport2015_ Highlights.pdf
- Velikonja, M. (2009). Nostalgia for socialism in post-socialist countries. East European Politics and Societies, 23(4), 535–551.
- Vlase, I., & Croitoru, A. (2019). Nesting self-employment in education, work and family trajectories of Romanian migrant returnees. *Current Sociology*, 67(5), 778–797.
- Wallenborn, M., & Heyneman, S. P. (2009). Should vocational education be part of secondary education? *Journal of Educational Change*, 10, 405–413.
- Warren, T. (2016). Work and social theory. In S. Edgell, H. Gottfried, & E. Granter (Eds.), *The Sage handbook of the sociology of work and employment* (pp. 34–51). Sage.
- Webb, S., Black, R., Morton, R., Plowright, S., & Roy, R. (2015). Geographical and place dimensions of post-school participation in education and work. NCVER.
- Wieland, C. (2015). Germany's dual vocational training system: Possibilities for and limitations to transferability. *Local Economy*, 30(5), 577–583.
- Wiemann, J. (2017). Export of German-style vocational education: A case study in the automotive industry in Puebla, Mexico. *International Journal of Automotive Technology and Management*, 17(2), 208–222.
- Wolf, A. (2002). Does education matter? Penguin Books Limited.
- World Bank. (2018). World development report 2018: Learning to realize education's promise. World Bank.

Part IV Enhancing the Standing and Status of Vocational Education: An Australian Study

Chapter 15 Investigating Enhancing the Standing of Vocational Education and the Occupation it Serves: Purposes, Processes and Phases



Stephen Billett, Sarojni Choy, Steven Hodge, and Anh Hai Le

Abstract Investigating issues associated with and strategies for enhancing the standing of vocational education necessarily involves engaging with a range of perspectives, insights and suggestions. This includes those who organise and implement educational experiences, those who enact them, and also those who directly influence the decision-making of young people, as well as those young people themselves. Of course, such a venture means capturing and comparing, contrasting and evaluating those perspectives. As insights and perspectives need to be captured in some detail, qualitative approaches to data gathering and analysis are essential. On the other, quantitative analysis is required to identify patterns across cohorts of informants and analyse their weightings and rankings. Accordingly, this chapter sets out the rationale for and approaches adopted in an investigation about enhancing the status of vocational education and the occupations it serves in Queensland, Australia. The investigation comprised an initial round of focus groups and interviews with school-age students, teachers and parents, students in vocational education institutions and their teachers (Phase 1). A careful analysis of focus group data, interview transcripts and surveys gathered through these interviews were then used to develop a survey that was administered nationally (Phase 2). That survey extended the scope of the study and the range of informants and provided a platform for quantitative analysis and comparisons of perspectives and suggestions of distinct cohorts of informants. Then, in Phase 3, suggestions about enhancing the status of vocational education were identified through a series of focus groups with school administrators and teachers. Weighting to sets of suggestions about what government, industry, schools, and teachers might do to offer well informed and impartial advice and engage with information about potential postschool pathways were analysed.

School of Education and Professional Studies, Griffith University, Brisbane, QLD, Australia e-mail: s.billett@griffith.edu.au

S. Billett (\boxtimes) · S. Choy · S. Hodge · A. H. Le

Keywords Vocational education and training · Standing · Post-school pathways · Decision-making · Interviews · Surveys · Teachers · Parents · Students · Australia

Enhancing the Status of Vocational Education

The relatively low standing of vocational education and training (VET) is of global concern, as it impacts young people's engagement in this important educational sector and the occupations it serves (Billett, 2014). This concern is acknowledged across countries with advanced industrial economies (Cedefop, 2014; Clement, 2014) and those with developing economies (UNESCO-UNEVOC, 2018, Billett et al., 2022). The heightened aspirations of young people and their parents, globally, does much to reinforce and entrench vocation education and the occupations it serves as a less- or non-preferred post-school option in a range of countries. This concern exists even in countries where VET is regarded as having relatively high status (e.g., Germany) (Deissinger & Ott, 2016) and is what Wyman et al. (2017) refer to as the 'university or bust' phenomenon. Indeed, regardless of whether vocational education is pursued in upper secondary schooling or as a post-school option, it faces challenges associated with its relatively low standing. Issues associated with the standing of vocational education and the occupations it serves have become a key concern in Australia with both federal and state governments (Parliament of Victoria Economic, Education, Jobs and Skills Committee, 2018) considering how it might be redressed. There are particular concerns that young people's preference for university entrance over vocational education are leading to skill shortages, on the one hand, and increasing numbers of these young people engaging in circuitous and ever-lengthening higher education studies that are not specifically aligned with occupational outcomes nor leading directly to employment, or increasing study debts, on the other (Parliament of Victoria Economic, Education, Jobs and Skills Committee, 2018). Besides, evidence that VET graduates are known to earn salaries comparable to university graduates (Hargreaves & Osborne, 2017) seems to remain unattractive.

The process of identifying and selecting an occupation is central to the project of vocational education. Dewey (1916) proposes it as the first of two goals for education in preparation for occupations. He holds that the priority is to assist young people identify the calling or occupation to which they are most suited. Only then, should the focus be on preparing them for that occupation. He argues that there is the risk that individuals who fail to identify an occupation to which they were suited will lead to them being stuck in uncongenial callings (i.e., in occupations that they were uninterested and/or ill-suited). It follows that the process of identifying a preferred occupation and the post-school pathway is an important goal for vocational education. As elsewhere (Clement, 2014; UNESCO-UNEVOC, 2018), there is growing concern in Australia that this decision-making is being driven by the heightened and possibly unrealistic aspirations of young people and their parents, and that their decision-making about post-school options may be inadequately or

impartially informed. Given its importance both for young people's immediate postschool trajectories and their ability to secure the range of skills required to meet economic and social needs, it becomes necessary to identify factors shaping their decision-making. Specifically, there is a focus on understanding what needs to occur for vocational education and the occupations it serves to be considered as viable and worthwhile post-school pathways by these young people and those advising them.

Changes to the Australian VET system over the last few decades including differentiation through mandated competency-based training, its privatisation and narrowing profiles, as well as recent controversies associated with poorly regulated private providers have done little to enhance its standing, nationally. Indeed, as in other countries, the very public way these changes and controversies have played out may have fuelled global trends of increasing aspirations that are eroding the status of VET and reinforcing decisions favouring higher education as the preferred post-school pathway. VET reform commencing in the 1990s reshaped many aspects of the Australian system (Smith & Keating, 2003), including presenting and promoting it as having very pragmatic and limited focuses. Government policy aimed for a marketised VET system with public funding progressively made available to both private training companies and public providers has potentially also contributed to this low status, by positioning it as a form of educational service that can be provided by anyone, but preferably the lowest bidder. The influx of private companies into the 'training market' added to lower status through serial scandals where private providers who accessed public funds, targeted ill-informed and vulnerable people to enrol in courses for which they were ill-equipped and failed due to inadequate support. Consequently, large numbers of students were left with debts for qualifications that did not lead to employment (Warburton, 2016) or made dropout decisions during apprenticeship training (Powers, 2020; Powers & Watt, 2021). Wide press coverage and public outrage left the entire VET sector with a tarnished reputation, as members of the general public would not be able to discern the differences between legitimate and dishonest providers, particularly when the latter imitated the institutional titles of the former. Marketisation of VET also had a negative impact on public providers by reducing their funding, making it difficult for them to pursue their traditional social mission (Wheelahan, 2016). Vocational education institutions that were household names and served well their communities in cities and some of the most remote parts of Australia were dismantled and masked through restructures, mergers and closures. Thus, the public perception of VET was dramatically altered with doubts raised about its integrity and status as a worthwhile postschool educational option.

Changes more internal to the VET system may also be indirectly contributing to wider perceptions of quality with VET. These include the shift to a competency-based curriculum which has narrowed the focus of vocational education to immediate employer needs (Wheelahan et al., 2015). Added here is the downgrading of teachers' professionalism through restricting their discretion and only requiring minimal preparation and qualifications (i.e., Cert. IV) for those teaching in the sector (Hodge, 2016). Perceptions of VET may also be undermined by falling levels of funding over time when compared with higher education which saw expanded

funding (Joyce, 2019) and ability to attract large numbers of overseas students, making it difficult to compete in terms of facilities and marketing. So, changes to Australian VET operate against being an attractive and worthwhile post-school option not only for young people, but also those who advise and influence their decision-making (i.e., parents, teachers and other familiars).

The key influences on young people's decision-making about post-school pathways as identified in Europe are: (i) parents, (ii) schoolteachers, (iii) work experience, and (iv) school guidance officers (Clement, 2014), who are all close or proximal sources of advice. Yet, as elsewhere, there are concerns that despite these sources of advice being insufficiently informed, they are highly influential in shaping young people's decision-making about preferred occupations (Fuller et al., 2014). Students' confidence in career advisors in some Australian schools is reported as being low (Bisson & Stubley, 2017). These researchers (Choy et al., 2022; Hodge et al., 2022) also identified unevenness in advice about and encouragement for VET options such as apprenticeship in high schools. While it has been suggested that promoting vocational education as a worthwhile post-school option is best achieved through schooling, this can be difficult because university entrance is often privileged in high schools (Clarke, 2015). Such privileging is, in part, a product of school performance measures (i.e., graduates' university entry), but also a reflection of VET being unknown to and viewed negatively by many who assist young people's decision-making (e.g., parents and teachers) (Billett et al., 2020). As in Australia, UK research found that whilst influential in young people's decisionmaking, teachers had insufficient knowledge and experience outside of their own careers to provide informative advice (Fuller et al., 2014). A specific and relevant finding is that the process used in Queensland schools to advise young people and their parents about post-school pathways may work against generating diverse postschooling options. Hay and Sim (2012) report teachers' personal preferences and biases are overly influential in this process and can direct students in unhelpful ways and only to vocational education when students are deemed to be 'low school achievers' (i.e., unlikely to meet university entrance requirements).

Australian parents' ability to provide informed advice to their children has been uneven. Students from disadvantaged backgrounds may be further disadvantaged by limited parent knowledge, engagement and direction (Bisson & Stubley, 2017; Lamb et al., 2018). An American study (Phillips, 2012) suggests that educating parents is now required about the worth of occupations not seen as high status, emphasising demanding requirements (i.e., cognitive, procedural) to perform that work. Yet, more than this, not all school-leavers have decided what is their preferred occupation. This lack of clarity, undecidedness and confusion or 'occupational uncertainty' (Sikora, 2018) is evident in much of the student data reported by Gore et al. (2017) and Hargreaves and Osborne (2017). A broad consensus (Cedefop, 2014; Clement, 2014; UNESCO-UNEVOC, 2018) is that, perhaps unsurprisingly, young people are primarily interested in stable, secure, and well-paid employment, and this is seen as being a more likely outcome from participation in higher, than in vocational education. As Wolf (2011) reports from the UK, many young people avoided engaging in post-school options that were seen to be too occupationally

specific and socially-undesirable, whilst being attracted to courses that were less occupationally specific, and more socially desirable. Australian vocational education students' post-school preferences are also associated with gender, age and educational achievement (Gore et al., 2017). For many students their social and economic backgrounds are mediating factors in their knowledge of, scope for, and decision-making about post-school pathways. What is required now is identifying more fully the factors shaping individuals' participation in VET and choice of occupations (Fowler, 2017). Moreover, there is a need to identify how vocational education can be viewed as being a worthwhile, viable and potentially attractive post-school option for young people. This requires understanding the decision-making processes young people participate in and the influences on that decision-making. Perhaps only through understanding these processes and factors will it be possible to identify strategies to enhance the standing of vocational education. These are the key focuses of the inquiry reported and discussed here.

Drawing on the processes of this investigation, which sought to understand the factors shaping young people's decision-making about post-school pathways, this chapter outlines the approach undertaken and procedures adopted to investigate these phenomena with the aim to suggest what might be done to redress this situation. That is, for young people and those influencing their decision-making to make informed and more balanced decisions about post-school pathways, including consideration of vocational education and the occupations it serves as potentially worthwhile and viable options for them. The investigation was conducted in the Australian state of Queensland. Phase 1 comprised gathering data through interviews and focus groups with high-school-aged-students, those who teach them and their parents, as well as vocational education students and their teachers. This was followed by a survey in Phase 2. Over 800 informants responded to verify and extend the findings of the interviews and focus groups. In Phase 3, workshops, focus groups and roundtable discussions were organised to review the findings from Phases 1 and 2 and consider specific interventions to promote VET as an option.

In the Australian context, 'post-school' refers to educational pathway after compulsory secondary education. Australian VET has qualifications covering most industry areas that sit within specific bands of the Australian Qualifications Framework (AQF). It ranges from AQF 1 (pre-employment courses) to AQF 10 (university doctorates). VET covers AQF levels 1 to 6. Some Training Packages contain Graduate Certificate and Graduate Diploma (Levels 7 and 8) qualifications, but these are becoming less common and are rarely taught in VET. The first four levels are Certificate I to Certificate IV, Level 5 is Diploma and Level 6 is Advanced Diploma are those that comprise vocational education provisions. Most VET students are in Certificate II to Certificate IV qualifications, with apprentices, for example, usually studying Certificate III qualifications; in 2019, almost half (47.2%) of students were in Certificate III programs (NCVER, 2021). The Australian VET providers comprise of public institutions known as Technical and Further Education (TAFE) and private ones known as Registered Training Organizations (RTOs). In addition, VET is also taught in most senior secondary schools (students aged 16–18), but that sub-sector is not covered in this project.

S. Billett et al.

Investigating Decision-Making About Post-School Pathways

As foreshadowed, the project sought to understand the factors shaping young people's decision-making process associated with post-school pathways and what kinds of interventions might be helpful in presenting vocational education as a viable pathway. The project was funded by the Queensland Government and engaged 11 state high schools, three vocational education institutions and teachers and students from those institutions, as well as parents of school-aged students from some of the schools located in the metropolitan area of the capital city (Brisbane) and in regional Queensland. The student focus groups, and teacher interviews occurred within the school and vocational education premises, whereas parents were interviewed by phone or face-to-face at an agreed site.

The research questions informing the project are as follows:

How can vocational education's standing be enhanced to secure greater participation and better educational outcomes for its graduates?

The informing sub-questions are:

What shapes Queensland community members' perceptions of vocational education and the occupations it serves?

What has to change to realise enhanced engagement by students and support from parents and employers?

The processes described and reported here are those derived from the three phases of the project, including (i) the students' interviews and focus groups in Phase 1, (ii) descriptive analyses and interpretation of the survey in Phase 2, and (iii) school visits for presentation of findings followed by discussions with school staff, teachers and administrators to identify how the practical strategies might be implemented. The overall orientation of the data-gathering and analysis was to identify sources and factors shaping school students' decision-making about post-school pathways, and vocational education per se. This required gaining insights from school students, schoolteachers, parents, vocational education students and their teachers about their perspectives and influences on that decision-making. That is, to capture the suggestion being projected by the social world and individuals' take up of that suggestion. Figure 15.1 summarises the methods associated with the sequence of the exploration.

As the research was conducted sequentially, including sampling, data collection, and data analysis, the research procedures are discussed under these phases in the following sections.

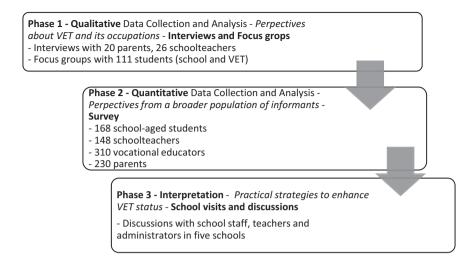


Fig. 15.1 Research design across the three phases

Phase 1: Capturing the Qualities, Sources and Consequences of Societal Sentiments

This phase comprised interviews and focus groups of VET students, school students, their parents, and their schoolteachers, and in low-, mid- and high-SES metropolitan and regional communities to secure perspectives about VET and its associated occupations. Both parent and student focus groups occurred in: (i) a high achieving state high school (i.e., Academic High), (ii) a mid-range high school (i.e., Coast High), (iii) a lower SES community (e.g., Southside High), and (iv) a regional state school (i.e., Plains High). Focus groups also occurred with current students in three vocational education institutes (Apprentice Centre, Coaltown TAFE, Tech College). A total of 111 school and VET students, 20 parents and 26 schoolteachers participated in these interviews and focus groups. While school students shared their perspectives prior to making their final decisions, the VET students reflected on their experiences before they started their studies in VET.

The approach adopted was to engage informants about their perspectives from a personal level. That is, how they perceive VET and as it influences their decision making, or their children, rather than somebody else's. Whilst based around the same set of focuses: (i) occupations and you; (ii) vocational education and you and (iii) enhancing the standing of vocational education and the occupations it serves, separate interview schedules were developed for the four informant groups.

In the students' focus groups and individual interviews, demographic data about participants were captured on worksheets (e.g., age, gender, educational achievement, statements about educational and occupational preferences and their sources

¹These names are pseudonyms

and, where appropriate, work histories). Other statements gathered through prompts were entered onto a hard copy interview schedule to optimise informants' time, and for ease of entry into a data base. To secure grounded and informed qualitative data, responses to scenario-based procedures were gathered through interviews and group discussion. These qualitative responses were recorded, transcribed, and then entered in a data base. Data were then tabulated under categories associated with specific classes of informants: students, parents and teachers. Within that tabulation, thematic analyses were undertaken, themes were identified, and data categorised and clustered within tables. The quantitative data were analysed descriptively (e.g., frequencies and cross tabulations) and aligned with qualitative responses to the open questions. These analyses aimed to identify patterns of factors shaping societal sentiments about vocational education and the occupations it serves and how these might be enhanced.

Parents were asked questions under three categories: (i) You, your children and occupation; (ii) Vocational education and you; and (iii) Enhancing the status of vocational education and the occupations it serves. In the first section, data was gathered about the individual; their children and level of education and also what the parent was doing at the age of 25; the kind and level of education required to be employed in that form of work; and whether they would recommend that work to their children; finishing with a question about what for them comprise worthwhile occupations. In the second section, they were asked about their preferences for university versus vocational education, whether vocational education is seen as being worthwhile option for their children and friends of their children. They were then asked to indicate the kinds of educational achievement required to enter specific occupations. The third section focused on how the standing of vocational education and the occupations it serves (SVEOS) could be enhanced. The parents were asked to indicate the influence of a range of suggestions on young people's thinking and acting (e.g., positive news stories, good role models in television, positive social media, career websites, showing jobs as being important, high-paying etc). Then, they were asked to rank a series of statements about what might change their views about vocational education. They were then asked about who or what influences their children's decisions about career choices (i.e., parents, schoolteachers, guidance officers, friends, others). They were asked to rate a series of suggestions about how vocational education might be made more attractive to young people. Table 15.1 summarises the interview schedule (i.e., structure, foci, and question examples) for parents.

So, the overall concern was to understand these parents' personal perspectives, how and what they report as influencing their children's decision-making, and how a more positive view of vocational education and the occupation it serves might be engendered. Teachers were asked the same set of questions with a focus on their students. Scales and ranking of these strategies were used to gather quantitative responses about their perceived worth.

The analysis of these data focused on the perceived purposes and role of vocational education and contributions to young people's decision-making about occupations, including what constitutes worthwhile work and preferred post school

Section	Question foci	Question types	Examples
1- You, your children, and your occupation	Background details about the individual, their children, their work	Multiple choices and open-ended	What work were you doing when you were aged 25? What kind of education pathway and experiences took you to that work?
2- VET and you	VET versus higher education	Multiple choices, open-ended and Likert-scaled	Is vocational education a good option for students and why?
3- Enhancing SVEOS	Influences on young people's decision making about post- school pathways	Multiple choices, open-ended and Likert-scaled	What should be done, nationally, to make occupations served by vocational education more attractive as career choices? To what degree would the following be helpful in making vocational education more attractive? [examples of initiatives]

Table 15.1 Structure of the interview schedule for parents

pathways. Details of the analysis and findings from Phase 1 are presented and discussed in Hodge et al. (2022).

Phase 2: Verifying and Elaborating Findings Through Survey

The findings from Phase 1 interviews and a review of initiatives were used to develop, pilot and administer an online survey to verify and elaborate the findings across a broader population of parents, schools, and vocational education students, and vocational teachers. The survey was made accessible, easy and quick to complete online. The survey comprised four sections gathering data and responses about: (i) demographic background, (ii) perceptions of getting more people interested in VET, (iii) views about factors influencing post-school pathways, and (iv) perceptions of VET in relation to higher education. It provided both quantitative and qualitative data. The survey items consisted of a series of multiple-choice, Likertscaled and open-ended questions. Five-point Likert scales were used to measure (i) levels of importance on messages promoting the standing of vocational education and factors in decision-making about post-school pathways, (ii) levels of effectiveness with means of presenting informed and positive messages, (iii) levels of influence of different stakeholders on young people's decision-making about post-school pathways, and (iv) levels of agreement on the attractiveness of a clearly defined pathway from VET to university and changing name of VET institutions. Table 15.2 provides a summary of the items.

The items in the survey gathered demographic information in the first section about the age, gender, informant category, and whether the respondent had

Table 15.2 Details of Likert-scaled questions

		Type of Likert	
Survey section	Details	scale	Measurement units
Perceptions of getting more people interested in VET	Messages promoting the standing of vocational education	Levels of importance	I= Not at all important 2= Slightly important 3= Moderately important 4= Very important 5= Extremely important
	Presentation of informed and positive messages	Levels of effectiveness	I= Not at all effective 2= Slightly effective 3= Moderately effective 4= Very effective 5=Extremely effective
Views about factors influencing post-school pathways	Factors in decision-making about post-school pathways	Levels of importance	I= Not at all important 2= Slightly important 3= Moderately important 4= Very important 5= Extremely important
	Influences of different stakeholders on decision-making about post-school pathways	Levels of influence	I= Not at all influential 2= Slightly influential 3= Moderately influential 4= Very influential 5= Extremely influential
Perceptions of VET in relation to higher education	Attractiveness of a clearly defined pathway from VET to university and changing name of VET institutions	Levels of agreement	I= Strongly disagree 2= Disagree 3= Neutral 4= Agree 5= Strongly agree

school-aged children. The next section invited responses to a set of items that were identified in the first phase about i) what might make more people be more informed about vocational education, ii) the most effective means of conveying messages for young people to make it more worthwhile, and iii) those who needed to be more informed about vocational education to enhance its standing. Then, in the third section of the survey, responses were invited to propositions arising from the first phase findings along with ratings of factors judged to be influential in young people's decision-making.

The administration and distribution of the survey was facilitated through school and institutional contacts and through social media. Incentives in the form of prizes were included and described in the information about the survey. Overall, responses were gathered from informant categories (i.e., parents, school and vocational education students and teachers) to provide responses representative of those categories. These outcomes verified and elaborated the findings from Phase 1 and permitted analyses across the entire data body. Over 1000 responses were received, and 842 useable surveys were analysed. The data were obtained from 168 school students, 148 schoolteachers, and 230 parents (excluding those identifying themselves as vocational teachers or schoolteachers) and 296 vocational teachers. Details of descriptive analyses and findings from Phase 2 are presented and discussed in Choy et al. (2022).

Phase 3: Augmenting Project Findings

The objectives for this phase were threefold. Firstly, to engage with selected heads of department, coordinators and teachers in Queensland high schools to discuss the potential of tentative findings and identify school-based strategies to enhance the status of post school vocational education options. Secondly, to understand how mechanisms such as the Senior Education and Training (SET) process (in which students consider post-school options with their parents and a teacher) could be used to enhance considerations of post school options that include vocational education pathways. Thirdly, to further advance the tentative findings and augment them with the additional analyses report the findings to both the state education department and broader audiences. These objectives were achieved by engaging with staff who had central interest with post school options from three high schools. The aim was to use schools and the relationships built with the staff members to achieve the first two objectives (i.e., discussions about findings and investigations about the SET process).

Several school visits contributed to this phase. The participants comprised school staff, teachers and administrators. In each of these visits, the research members progressed through an initial presentation of the key findings and then the participants engaged in small groups in which they addressed specific tasks related to these findings included in information sheets, in both hard copy and electronic form. The specific initiatives being discussed were most highly ranked in Phase 2. That is, a priority listing of initiatives was established and those that were most frequently mentioned were considered at the forums. As a consequence, at each of these forums the groups focussed on one or two of the initiatives so as to ensure that a larger number of initiatives were given consideration during these discussions.

The activities were grounded in the use of specific (anonymised) cases that were identified in Phase 1 as a basis for responding. For instance, "Taking the case of Jim, what strategies at a local, state and national level need to be enacted to make him see vocational education as a more viable and worthwhile option?" Then discussion was undertaken about how these various initiatives could be enacted.

Informants in these discussions suggested a range of practical strategies that might be enacted by: (i) VET institutions, (ii) schools, and (iii) government and business. These strategies are proposed as means by which actions can be taken to promote the image, attractiveness and viability of vocational education as a worthwhile post-school pathway. These strategies are presented and discussed in Billett et al. (2022).

Ethics and Dissemination

As data collection involved informants (i.e., school-aged children) under the age of 18, the project was subject to strict ethical clearance requirements through university and educational department processes. The project was firstly approved by the Human Research Ethics Committee of Griffith University (GU No: 2019/816) and was carried out in accordance with the National Statement on Ethical Conduct in Human Research. Next, permission to gather data from school students was provided by (i) a high achieving state high school (i.e., Academic High), (ii) a midrange high school (i.e., Coast High), (iii) a lower SES community (e.g., Southside High), and (iv) a regional state school (i.e., Plains High). Parental consent was also secured for gathering data (i.e., focus groups and anonymous surveys) from students under the age of 18. All ethical clearance and informed consent processes were managed by Griffith University with the distribution and collection of these forms coordinated by the research project manager.

Prior to conducting the interviews with parents and teachers, emails of invitation with an informed consent package attached were sent to gain permission and agreement to participant in the project. Assistance was sought from school coordinators to arrange focus group interviews with the students. The informed consent form was signed by each participant prior to taking part in the audio-recorded interviews.

The survey was administered online using the LimeSurvey tool. The informed consent information was presented in the introduction page of the survey. This information assured participants that the survey responses were anonymous and confidential, and participants could decide whether to participate in the research. Participants were advised to print the informed consent page for their future reference. Incentives in the form of prizes were included in the information about the survey. The use of incentives was considered a token of appreciation and acknowledgment of participants' contribution to the project, not for inducing the expected responses to the survey.

Findings have been disseminated across the project phases and in distinct ways to diverse audiences – locally, nationally and internationally. Combinations of seminars, conference presentations, research bulletin, and academic papers have been used to articulate practical and theoretical findings. Dissemination of findings from the three phases of the projects was presented in three book chapters (Billett et al., 2022; Choy et al., 2022; Hodge et al., 2022).

Limitations

As the project involved gathering data from informants under the age of 18 (i.e., school students). They were required to secure parental permission before participating in focus group interviews or completing the online survey. This proved to be a very difficult process as it required students to take home an informed consent sheet and return this in a hard copy form which was then transferred to the survey instrument manually. The process of getting parental consents, even for the surveys was limited to the number of the parents who were interested. That is, the small samples of parent and student groups were strongly impacted by parents' engagement. This led to some unevenness in the data set in terms of the number of interviews per informant group as well as survey responses from student group. In addition, the sample of informants was predominantly obtained in low-, mid- and high-SES metropolitan and regional communities in the state of Queensland, may not be generalisable to other states and territories. However, the findings are suggestive of possible patterns in Queensland and other regions across Australia. This research project was also limited by the use of web-based survey that restricted the length and types of questions that could be asked, in addition to making assumptions about the technological confidence of participants.

Conclusion

The perceived low standing of vocational education and the occupations it serves constitutes a significant impediment to this educational sector in realising its goals and full potential. These perceptions shape how individuals participate in, parents advise about, and employers' willingly to engage with and support vocational education, and the kinds of educational purposes expected of and processes enacted through it. This chapter has set out the rationale for and approaches adopted in an investigation about enhancing the status of vocational education within the Australian state of Queensland. This project was designed to build working relations with its informant cohort through effective engagements and identify viable and practical responses to enhancing the status of vocational education and the occupations it serves in Queensland. These relations arose from interactions with government, vocational education institutions and in schools about factors that inhibit participation in vocational education. Practical and viable strategies for improving the standing of vocational education were generated by engaging with a range of informants who are central to decision-making about participation in vocational education and those occupations.

The project had three phases. The first comprised focus groups with school-age students, their parents, in a range of high schools, and students in vocational education institutions; and interviews with their teachers and local employers to identify factors shaping those personal and societal sentiments that shape perceptions of and

decision-making about vocational education and the occupations it serves. The second phase comprised developing, piloting and administering a survey to reach broader populations of school-age students, their parents, vocational education students, and their teachers. The third phase engaged engagement with diverse parents, school and vocational education students, teachers and administrators to bench-test tentative approaches and processes in five development forums, including one each in regional and remote Queensland communities. The outcomes included recommendations and strategies for enhancing the status and standing of vocational education and the occupations it serves. The project design engaged, recognised and gave substance to participant perceptions, and accounts and suggestions for initiatives and interventions to address a fundamental problem which inhibits the worth of vocational education being fully realised in Queensland and elsewhere. Details of analyses and findings from the three phases are presented and discussed in Hodge et al. (2022), Choy et al. (2022) and Billett et al. (2022) respectively.

References

- Billett, S. (2014). The standing of vocational education: Sources of its societal esteem and implications for its enactment. *Journal of Vocational Education & Training*, 66(1), 1–21.
- Billett, S., Choy, S., & Hodge, S. (2020). Enhancing the standing of vocational education and the occupations it serves: Australia. *Journal of Vocational Education & Training*, 72(2), 270–296.
- Billett, S., Dymock, D., Choy, S., Hodge, S., & Le, A. H. (2022). Chapter 18: Practical strategies and distributed responsibilities: Enhancing the standing of vocational education and the occupation it serves. In S. Billett, B. E. Stalder, A. Vibe, S. Choy, S. Hodge, & A. H. Le (Eds.), *The standing of vocational education and the occupations it serves: Current concerns and strategies for enhancing that standing*. Springer Nature.
- Bisson, R., & Stubley, W. (2017). After the ATAR: Understanding how gen Z transition into further education and employment. Year13/YouthSense.
- Cedefop. (2014). Attractiveness of initial vocational education and training: Identifying what matters. Cedefop Publication.
- Choy, S., Le, A. H., Billett, S., & Hodge, S. (2022). Chapter 17: Surveys of students, parents and teachers (Phase 2). In S. Billett, B. E. Stalder, A. Vibe, S. Choy, S. Hodge, & A. H. Le (Eds.), *The standing of vocational education and the occupations it serves: Current concerns and strategies for enhancing that standing*. Springer Nature.
- Clarke, K. (2015). Careers education must be for all, not just those going to university. *The Conversation*. Published: October 20, 2015 11.26am AED.
- Clement, U. (2014). *Improving the image of technical and vocational education and training*. Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH.
- Deißinger, T., & Ott, M. (2016). Tertiarisation of vocational education and training and its implications: Problems and issues in Germany and France (pp. 267–296). KOPS Universität Konstanz.
- Dewey, J. (1916). Democracy and Education. New York: The Free Press.
- Fowler, C. (2017). The boundaries and connections between the VET and higher education sectors: "Confused, contested and collaborative." Occasional paper. National Centre for Vocational Education Research Ltd.
- Fuller, C., McCrum, E., & Macfadyen, T. (2014). Teachers' knowledge and experiences of information advice and guidance: Some implications for the current policy context in England. *Education Inquiry*, 5(2), 23922.

- Gore, J., Ellis, H., Fray, L., Smith, M., Lloyd, A., Berrigan, C., Lyell, A., Weaver, N., & Holmes, K. (2017). Choosing VET: Investigating the VET aspirations of school students. NCVER.
- Hargreaves, J., & Osborne, K. (2017). Choosing VET: Aspirations, intentions and choice. National Centre for Vocational Education Research (NCVER).
- Hay, S., & Sim, C. (2012). Excluded from the game: A case study of transitions for nontertiary-bound students in a Queensland private school. In Experience of school transitions (pp. 179-199). Springer.
- Hodge, S. (2016). Alienating curriculum work in Australian vocational education and training. Critical Studies in Education, 57(2), 143-159.
- Hodge, S., Billett, S., & Choy, S. (2022). Chapter 16: Influences on post-school decision-making: Perspectives of school students, parents, teachers (Phase 1). In S. Billett, B. E. Stalder, A. Vibe, S. Choy, S. Hodge, & A. H. Le (Eds.), The standing of vocational education and the occupations it serves: Current concerns and strategies for enhancing that standing. Springer Nature.
- Joyce, S. (2019). Strengthening skills: expert review of Australia's vocational education and training system. Commonwealth of Australia, Office of Prime Minister and Cabinet, Canberra, Australia.
- Lamb, S., Maire, Q., Walstab, A., Newman, G., Doecke, E., & Davies, M. (2018). Improving participation and success in VET for disadvantaged learners (Research report). National Centre for Vocational Education Research (NCVER).
- National Centre for Vocational Education Research. (2021). Total VET students and course 2019. Adelaide, Australia.
- Parliament of Victoria Economic, Education, Jobs and Skills Committee. (2018). Inquiry into career advice activities in Victorian schools. Victorian Parliament.
- Phillips, M. (2012). Why should we care about vocational education. The George Lucas Educational Foundation.
- Powers, T. E. (2020). Motivated apprentices: The value of workplace and trade school. *Journal of* Education and Work, 33(1), 81–97. https://doi.org/10.1080/13639080.2020.1716309
- Powers, T. E., & Watt, H. M. G. (2021). Understanding why apprentices consider dropping out: Longitudinal prediction of apprentices' workplace interest and anxiety. Empirical Research in Vocational Education and Training, 13(1). https://doi.org/10.1186/s40461-020-00106-8
- Sikora, J. (2018). Aimless or flexible? Does uncertainty in adolescent occupational expectations matter in young adulthood? Australian Journal of Education, 62(2), 154–168.
- Smith, E., & Keating, J. (2003). From training reform to training packages. Social Science Press. UNESCO-UNEVOC. (2018). Short summary of the Virtual Conference on improving the image of TVET: Making TVET attractive to youth. https://vocationsandlearning.files.wordpress. com/2019/10/vc_synthesis_21_final.pdf
- Warburton, M. (2016). The VET FEE-HELP debacle: Helping its victims and lessons for administration. LH Martin Institute, Carlton, Victoria, Australia.
- Wheelahan, L. (2016). Patching bits won't fix vocational education in Australia-a new model is needed. International Journal of Training Research, 14(3), 180–196.
- Wheelahan, L., Buchanan, J., & Yu, S. (2015). Linking qualifications and the labour market through capabilities and vocational streams. Synthesis report. National Centre for Vocational Education Research Ltd.
- Wolf, A. (2011). Review of vocational education: The Wolf report. https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/180504/ DFE-00031-2011.pdf
- Wyman, N., McCrindle, M., Whatmore, S., Gedge, J., & Edwards, T. (2017). Perceptions are not reality: Myths, realities & the critical role of vocational education & training in Australia. Skilling Australia Foundation, 25p.

Chapter 16 Influences on Post-School DecisionMaking: Perspectives of School Students, Parents, Teachers (Phase 1)



Steven Hodge, Stephen Billett, and Sarojni Choy

Abstract Parents, teachers and other familiars each play a significant role in the process of young people's decision-making about occupations and educational pathways, albeit sometimes inadvertently and unintentionally. Other factors such as societal sentiments about occupations also shape the decision-making, while students, parents and teachers may be understood as selectively mediating these broader influences. This chapter reports and discusses the findings of a project conducted in Queensland, Australia, that sought to elaborate processes of decision-making, the various actors' influence on it, and how students mediate these suggestions. It also describes and discusses a qualitative phase of the research which sought perspectives of students, parents and teachers about vocational education and decision-making regarding school age children's post-school study and work options. The analysis revealed a complex of factors and negotiations that shape this decision making.

Analyses of student interview data revealed wide variation in level of certainty about post-school options among students and parents. The degree to which students and their parents were informed about options, including the nature of occupations, and what educational pathways lead to particular occupations, were all factors in level of certainty in decision-making. These data also pointed to a tendency to favour higher education pathways when level of uncertainty was higher. At the same time, limited or distorted information about pathways and occupations facilitate influence of societal sentiments on decision-making. Teachers interviewed were informed about pathways that reflected their own experiences. They often articulated an awareness of the constraints on student decision-making arising from government, education system or school policy that favoured higher education pathways and/or undermined the image or efficacy of vocational education as a viable option for young people. Students, parents and teachers also provided suggestions

School of Education and Professional Studies, Griffith University, Brisbane, QLD, Australia e-mail: s.hodge@griffith.edu.au

S. Hodge (\boxtimes) · S. Billett · S. Choy

about how to enhance the standing of vocational education and the occupations it serves. Through analyses of these findings, a more nuanced understanding of the processes of educational and occupational decision making is possible, in turn allowing more informed responses to shape decision-making about post-school pathways, and how vocational education can be viewed in a more constructive and impartial way.

Keywords Post-school decision making · Vocational education and training · Career choice · Pragmatic · Rational · Teachers' perspective · Parents' perspective · Students' perspective · Interviews · Different perspectives

Influencing Decisions About Post-School Pathways

Parents, teachers and other familiars each play a significant role in the process of school-age children's decision-making about occupations and educational pathways (Billett et al., 2020). This decision-making process is complex. Parents and teachers influence the process through their interests in and proximity to those young people, albeit sometimes inadvertently and unintentionally. Broader societal sentiments, such as valuation of some occupations over others, can shape young people's decision-making, with parents, teachers and students themselves often mediating these suggestions. Mediated influences include societal sentiments about occupations, community priorities relating to local industries and established family sentiments about particular pathways and occupations. A complex decision-making process is thus compounded by the confluence of suggestions about occupations and educational pathways, through interactions with parents, teachers and students, each selectively mediating and acting on these messages.

A range of explanatory models have been proposed which recognise the 'transition point' from compulsory schooling into further education and occupations as precipitating the process of decision-making (Cuconato & Walther, 2015; Payne, 2003). At the same time, research has indicated the problematic nature of this decision-making when it is based on limited or distorted understanding of educational pathways and occupations (Clarke, 2015; Clement, 2014; Fuller et al., 2014; UNESCO-UNEVOC, 2018). Such partiality of knowledge on which decisionmaking is based at this important transition often and increasingly favours higher education, regardless of the interests and capacities of the young people involved. A key consideration in this regard is perceptions of the lower standing of vocational education and the occupations it serves (Billett, 2014; Cedefop, 2014; Noonan & Pilcher, 2018). Thus, an understanding of young people's decision-making about post-school educational pathways and occupations needs to reflect the complexity of the process, limitations and distortions to the knowledge drawn on in this decision-making, and perceptions about vocational education and the occupations it serves.

This chapter reports and discusses the qualitative findings of a project that sought to elaborate these processes of decision-making, the various actors' influence on them, and how students mediate and act on these suggestions. It sought perspectives of students, parents and teachers about vocational education and decision-making regarding school and post-school study and work options. The chapter opens with a review of literature about influences on and processes of young people's decisionmaking. This is followed by a brief overview of the methods employed before findings are presented and discussed. Prominent among these findings is the wide variation in level of certainty about post-school options among students and parents. The degree to which students and their parents were informed about options, including what different occupations comprise, and what educational pathways lead to particular occupations, was a factor in decision-making. These data also pointed to a tendency to favour higher education pathways when level of uncertainty was greater. Through analyses of these and other findings, a more nuanced understanding of the processes of educational and occupational decision making is illuminated that, in turn, allows for more informed responses to shape decision-making about post-school pathways, and how vocational education can be viewed in a more constructive and impartial way as a viable post-school option.

Processes and Influences on Young people's Decision Making

Attempts to make sense of young people's decision-making about occupations and educational pathways have recognised that the process is complex, citing societal influences that are mediated by familiars and young people themselves. Payne (2003) differentiated three explanatory models of decision-making employed by researchers to explain young people's decision-making at the end of compulsory schooling: the structuralist, economic and pragmatic. The first of these models and the earliest of the three developed (i.e., structuralist), viewed decision-making as highly constrained, with research emphasising the strong influence of institutional, economic and cultural conditions. Well-signposted career paths and clear expectations of following family and class trajectories were described under this model. However, contemporary education and work patterns are more variable and unstable than the conditions that informed structuralist analyses, disrupting established pathways. The economic model, derived from the human capital approach to analysing educational choices, viewed young people as making rational investment decisions to maximise return for themselves. In this instance decision making may be influenced by how young people and society at large perceive the quality of programs (VET or HE) (Harvey, 2007). Payne (2003) cites research that challenged the economic-rationalist model, finding that calculating returns on educational investment had to contend with unrealistically extended timeframes and that 'rationality' was itself impacted by many non-economic factors, such as students' preferences. The third 'pragmatic' model sought to overcome the limitations of structural and economic models by recognising both the constrained nature of decision-making

while acknowledging that some calculation of return on investment is generally undertaken. According to the pragmatic model, structural constraints and economic calculation are only elements in a process that can also involve influences of family background, culture and life-history.

The pragmatic model espoused by Payne (2003) is consistent with the 'interactionist' perspective of Cuconato and Walther (2015), which acknowledges broader structural factors that reflect societal norms or sentiments which may become formalised to some extent in government policies and institutional practices. These, in turn, can directly impinge on the lives of young people, and individual or personal factors that involve interests, agency and mediation. According to this perspective, young people's decision-making is to be understood as neither determined by structural factors, nor wholly autonomous and rational. Cuconato and Walther draw attention to a broad shift in the conditions of young people's decision-making from a period where career paths were well-signposted to the current situation marked by the 'de-standardisation of "normal" life courses' (Cuconato & Walther, 2015, p. 284). Like Payne (2003), Cuconato and Walther (2015) see limited relevance in structuralist models to understand contemporary post-school decision-making. Rather, young people are currently faced with the need to construct a life course for themselves which involves making decisions about education, training and occupations with relatively few precedents to draw upon. Writing in the European context, Cuconato and Walther argue that 'educational trajectories emerge from complex interactions between a diversity of socioeconomic, institutional and individual actors, and factors across different levels, are manifest at transition points' (Cuconato & Walther, 2015, p. 285). The end of compulsory schooling is a key transition point.

Post-school decision-making about educational pathways and occupations has scope to lead to satisfying and productive outcomes for young people if an alignment can be found between individual interests and capabilities on the one hand, and occupational demands and rewards on the other (Dewey, 1916). However, ample and comprehensive information needs to be available and accessed by decision-makers and those influential in that process to improve chances of finding the ideal described by Dewey. Clement (2014) found that parents, schoolteachers, work experience and school guidance officers were influences on young-people's decision-making and showed that adults in this process could possess partial or uninformed perspectives on the range of post-school pathways available, occupations and connections between them. Given their influence on young people's decision making, the partiality of information available to parents, teachers and other familiars has scope to delay or undermine possible alignment between young people and occupations.

Teachers are consistently reported as playing an important role in provision of information to young people and guiding their decision-making about post-school options. Research by Fuller et al. (2014) in the UK found that teachers lack confidence to provide impartial advice concerning occupations and educational pathways outside their sphere of direct experience. Given other findings that teachers are well-placed to provide advice (e.g., Clement, 2014), that their advice is valued, and

that they are called on to provide it, a concerning issue emerges. At the very least, teachers draw on a limited knowledge base when providing advice and where this advice is limited to the typical post-school educational pathways teachers have followed, i.e., higher education. Yet in a diverse and dynamic workforce and employment environment, not only is a comprehensive knowledge base necessary to adequately inform young people's decision-making, but this knowledge needs to be up-to-date. For example, new industries may have unclear educational pathways and influential adults may have very limited awareness of them (Clarke, 2015). Furthermore, such advice discounts foundations that form pathways into related occupations.

A pervasive influence or bias implicit in the knowledge base available to inform young people's decision-making about post-school options derives from societal sentiments about the standing of vocational education and the occupations it serves. Billett (2014) examined the sources of this sentiment, describing long-held prejudices that are reinforced by contemporary education institutions and systems. In the contemporary setting, young people's decision-making is influenced by the tendency to compare vocational and higher education, a comparison that often works against vocational education due to the relative 'attractiveness' of general/academic education (Cedefop, 2014). Three groups of factors that influence the attractiveness of post-school options include perceptions of the i) quality of programs, ii) tuition fees, and iii) education and labour market expectations and prospects, at least in the European context.

In the Australian context, however, concerns about the quality of vocational education programs have been increasing in the wake of reforms to the vocational education and training system that ushered in policies to increase competition among providers (Smith & Keating, 2003). Incentives provided by governments to providers to participate in the vocational training 'market' have in some cases prompted unethical behaviour by some vocational education providers (Nakar et al., 2018). Significant publicity surrounded this controversy, with stories presented in the national news and current affairs media about students accruing large government debts for courses with questionable labour market relevance (Warburton, 2016). In terms of tuition fees, government financial support for students contrasts markedly between vocational and higher education, with loans for vocational education subject to higher fees (Noonan & Pilcher, 2018). Differing levels of financial support can mask the fact that, on average, vocational education is better value for money than higher education in Australia. In addition, education and labour market expectations and prospects often work against vocational education in Australia, in great part due to training reforms tending to have narrowly defined occupational outcomes for these programs (Buchanan et al., 2009). These goals are counter to what labour market commentators are emphasising about the need for young people to develop broader employability skills – such as communication and problem-solving (Joyce, 2019). In the light of Cedefop.'s (2014) factors shaping the attractiveness of post-school pathways, in Australia there are multiple messages that favour higher education in comparison with vocational education, perpetuating long-standing sentiments about the standing of vocational education (Billett, 2014).

The literature paints a picture of post-school decision-making about educational pathways and occupations as a complex process progressing with different types of influence – from broad societal sentiments shaping the attractiveness of choices to concern with financial reward – that interact in multiple ways, largely due to mediation of influences from parents, teachers and other familiars. The research project that is the basis of this chapter set out to clarify these influences and interactions in the context of post-school decision-making among young people in Queensland, Australia. Given the recent experience of participants in this complex process, information was sought from them about how their decision-making might be better informed and how societal sentiments could be shifted in a way that allows for a more balanced perspective on the value of vocational education as a potential pathway for young people.

Investigating What Influences Young people's Decision-Making

The data presented and analysed in this chapter are taken from a large mixedmethods research project which is described in Billett et al. (2022a). These data arise from Phase 1 of the project, which comprised one-on-one interviews with 20 parents and 26 secondary school teachers, and individual and group interviews with 111 students. The students were recruited from across four high schools, each of which were selected so that a range of levels of socioeconomic advantage were represented. Four metropolitans (i.e., Academic High, Suburban High, Catholic High & Agriculture High) and a regional school (Regional High) were selected for recruitment purposes. These recruitment sites were selected to maximise diversity of location and background of informants. Refer to Billett et al. (2022a) for more detail on the methods used in this research. Students were given worksheets to capture basic data about their age, gender, educational achievement, and educational and occupational preferences and influences. In the interviews, students responded to prompts about post-school pathways and occupational decision-making. In the parent interviews, questions were asked about them, their children and own occupation, their perspectives and experiences with vocational education, and their suggestions were sought for improving the status of vocational education and the occupations it serves. Teachers were asked the same questions, but with a focus on their students rather than their own children.

These qualitative data were recorded and transcribed for analysis. Thematic analysis was undertaken on responses from students, parents and teachers separately, followed with cross-cohort analysis. This analysis focused on informants' perceptions about the purposes of vocational education, and the influences on young people's decision-making about occupations, what constitutes worthwhile work, and preferences for particular post-school pathways.

Findings: Perspectives and Influences

The findings from these qualitative data are presented according to the type of informant: school students, parents and teachers, in that order. The students' data indicate the complex of factors shaping their thinking about both occupational choice and post-school pathways. Note that the schools in which the students are taught, their teachers work, and parents engage in are indicated by the labels of Academic, Suburban, Coast, Plains and Regional High. Gender (M - male – F -female) and year level of the students are indicated next to direct quotes of their utterances. So, for instance, Academic High F10 is a year 10 female student at that school. By the end of Year 10 they have had to select their senior school subjects (Years 11 and 12), which has been predicated a state-wide process in which all students work through a structured Senior Education and Training process to map out their post-school plans and senior year subjects.

Occupational Choice

Establishing the bases and processes by which these young people make decisions about their preferred occupation is important for supporting and guiding the process. Most students articulated some reasoning for their decisions as being associated with post-school destination, revealing aspirations, preferences, and concerns. In some cases, students expressed a clear decision while others presented a dilemma – most often, between what parents wanted and what they themselves wanted – and then there were those whose reasoning was in a more fluid state, unsure what they wanted. Examples of clear occupational goals were presented by these students:

I want to be a pilot so bad ... that is my dream job ... ACADEMIC HIGH F 10 I want to go into nursing because I want to help people. REGIONAL HIGH M 10

I want to follow my family's footsteps. My dad and my brother are motor mechanic and I kind of enjoy that stuff so ... and um ... I can work on big machinery and stuff and get paid lots. REGIONAL HIGH F 10

In this way, students who had decided their preferred occupational pathway, were able to justify that decision, often in terms of personal preference or interest. Some students, however, were clear about types, characteristics or features of an occupation, not just a specific preferred occupation, thereby expressing broader imperatives driving their choice rather than interest in a specific occupation:

Stability is most important. Even if well paid, and then you suddenly lose your job then you're out of a job and god knows how long that's going to be, whether it be eight months because that's what happened to my older brother as well ... living off Centrelink [Welfare]. You have to enjoy it but more important is stability. SUBURBAN HIGH M10

Electrical or building or construction. I enjoy woodwork and electrical like if I was like to continue onto finish the trade I'm doing now and then go onto electrical I would be getting paid a bit better than a lot of jobs. REGIONAL HIGH F 10

These responses show young people bringing general considerations to bear in their reasoning about post-school pathways, by different degrees of certainty. These are nuanced and complex justifications that relate to influencing factors with the young people themselves positioned in an open-ended and fluid decision-making situation. Other school-age informants expressed their reasoning in terms of a tension between what parents want and they themselves want. For example,

Then I want to do law but they want me to do medicine but I just said to them like, 'Oh they both save lives - you know a doctor literally saves lives and a lawyer can save an innocent person...' ACADEMIC HIGH F 10/11 My dad says auto electrician because there's cars everywhere and you'll never be out of work and they're in pretty big demand right now ... but they get paid slightly less so I like money, you know. SUBURBAN HIGH M10 Because like in Indian communities there's always like ... I'll use Jeff as an example... Jeff's parents - his mum wants him to be an engineer, but Jeff's passion is to be a pilot ... he's focused on the fact he wants to do something [Jeff interjected and said his parents are still trying to persuade him] ACADEMIC HIGH M 10/11

In these examples, young people see themselves in a dilemma with well-defined parameters – what others want versus what they themselves want. The reasons offered on each side may derive from societal sentiments or family or community antecedents, but the tension between viewpoints sets a limit on such influences. In a few cases, some of these students indicated that tensions had been resolved:

I persuaded my parents actually. So, at first, I was getting a casual part-time job. And, they didn't want me to do it. My dad even said you know the amount of hours you study I'll pay you the same rate [you'd earn working part-time] and I said no because the responsibility that comes with it as well. So, I persuaded them with that. ACADEMIC HIGH F10/11

Some other students were uncertain of what they wanted to do beyond schooling, although there were some distinct directions to their thinking, which indicates one element of the complex of factors they need to address: choice amongst possible occupations:

I also kind of worry about the security because my ... I'm going to one of two things. Either ecology and environment based things, but then, like nursing is my other thing that I'm interested in. With ecology I'm swaying toward nursing, because even if you go to university with ecology there's no way you're going to get a job at the moment because I mean you can either go to the government and I don't feel that environmental science with the government is going that well, a lot of them don't believe in climate change and stuff like that, or like private stuff which is like funded and not secure because you have to get private. So, I think that the security is making me go toward nursing in that situation. ACADEMIC HIGH F 10/11

They [family] want me to be like a welder and a plumber coz that's like where the money is in the future ... don't get me wrong I cannot sit in the office all day I've got to be outside doing something ... like dads a farmer, mum works in the uni, I love farming and everything to do with it. Or the army coz I've been shooting ever since I was a little kid. REGIONAL HIGH M10

These quotes illuminate the processes through which some of these young people are mediating the complex of factors associated with making decisions about post-school pathways. They illustrate how those factors need to be engaged with and choices made to resolve impasses and arrive at a conclusion, even though that may be open to further negotiations. This mediation indicates that those who have already made a choice may have privileged particular factors (e.g., clean and well-paid work) over a broader consideration of a range of other factors (i.e., not all well-paid work is clean, clean work is not always well-paid). Then, there were students who remained undecided:

I'm a dancer but I just don't know yet \dots [we are] just stuck, we just don't really know. SUBURBAN HIGH F10

These responses reveal some of the complexities of young people's reasoning about post-school trajectories. A range of positions is suggested, with clear occupational choice a possibility, through to reflecting on general considerations about selected types of occupations, to being fundamentally undecided. Then for some young people, the influence of familiars becomes a point of contention, a process that appeared to prefigure factors and options around what others want for the young person and what they themselves prefer. These are the kinds of negotiations which sit amongst those that Payne (2003) refers to as pragmatic and Cuconato and Walther (2015) posit as interactional. What these views state is the intertwining of the suggestions and influence of others and young people's choices that arise from earlier socially-derived experiences, which Valsiner (1998) describes as premediated - those informing how the person responds to suggestions at the moment they are experienced.

Post-School Pathways

Understanding views about the kinds of pathways these young people plan to take, including those that are preferred, is helpful to understand how post-school educational or workplace options are identified and selected. Interview questions about educational pathways to occupations elicited responses from the students which indicated another level of complexity beyond the choice of occupation that ranged from informed decision-making, to uncertainty and confusion about educational options, requirements and pathways. Starting with the latter, and continuing with the response reported above of the student who wanted to 'be a pilot so bad', they went on to say,

... except, the thing is ... do you need to like take physics and stuff because I can't do physics for my life Honestly that is like my dream job ... I feel like ... Do you have to do an aviation course at university ...? Do you even need a degree to be a pilot? ACADEMIC HIGH F10

In the same vein, a student who was interested in becoming a police officer remarked,

Do you have to go to uni to be a police officer? I dunno. Do you know? REGIONAL HIGH M $10\,$

In both these instances, the students considered their individual capacities to actualise their goals. In a group interview, students in the regional (i.e., non-metropolitan) school commented on the general lack of information available to them about occupations and educational pathways, to effectively navigate and negotiate through complex of factors and how to balance personal preferences against other factors:

- F: Not enough information [about what to study to get particular jobs]
- M: We definitely need to know what to study to do something
- M: Pathways as well, how they can lead to things
- M: Help figure out what job to want, then how to do it
- F: More basic career information [matching interests with jobs] REGIONAL HIGH 10

There was uncertainty about general characteristics of pathways, as revealed in this exchange during a group interview in a state school whose espoused goals are for its student to progress to university:

- F: Do you have to finish school to go to TAFE [i.e., Technical and Further Education]?
- F: Don't think so.
- M: What! [shock] you don't need a high school diploma to go to TAFE?
- F: No, my dad went to TAFE and he didn't graduate high school ... and he's like ... [later came out as tradie/own business] ACADEMIC HIGH 10/11

Here, the reliance on beliefs, and perhaps dated experience (e.g. that of family members) indicates the degree by which this decision-making needs to extend to possibilities and practicalities of educational pathways (e.g. does the student have the entry qualifications?).

A number of responses elaborated comparisons between vocational and higher education.

I'm kind of unsure about it coz it's like you can sorta do the same like TAFE courses and like uni courses and qualifications and that, they'll sort of do the same thing to help you in that way but like um university's probably a bit more like better for it but it's more hard work. So if you wanna go the easy route, go TAFE. REGIONAL HIGH M 10

I think also maybe if you talk to people who are employing people and one person has a uni degree and one person has a TAFE degree they're going to take the person with the uni degree It just seems more like credible ACADEMIC HIGH F 10/11

Those comparisons and implicit judgements are likely to be premised upon societal suggestions about particular pathways (i.e. vocational education is easy; employers will prefer a degree-qualified person over somebody with vocational qualifications), rather than a more nuanced understanding about opportunities beyond the educational provision (e.g. an employer wanting an electrician will have to hire an electrical tradesperson trained through VET, because electrical engineer trained at university would not be licensed to do that work). The student who identified as a dancer had given the educational pathway some consideration that included her personal circumstances related to travelling to the educational institution and direct cost:

I was going to do a Cert III ['Certificate III' – an Australian vocational qualification] down the Coast in dance, but the school wouldn't do the timetable. It was gonna cost \$10,000 even if you didn't finish [the two years] SUBURBAN HIGH F10

Another was reasonably clear about a vocational education pathway:

Well, if you did TAFE, that would help in the Army if you wanted to construct things REGIONAL HIGH M $10\,$

Some students were more certain about educational pathways, suggesting prior research into options and systematic consideration of reasons for doing so and ways of engaging in them:

I'm planning on doing Cert 2 and 3 Sports and Recreation [vocational education qualification]. Going to try to do that and become like a coach or something and help out with events. One day a week while at school. Still get QCE. SUBURBAN HIGH M10

Go straight to TAFE, that's the plan... Outta here. Cert 2 Electrotechnology [vocational education qualification], that's full time for 10 weeks. You've got 8 weeks of learning and then 2 weeks of work. I'm looking forward to it. Cert 2 will help me get it [electrical apprenticeship] I mean one of mum's good friends is high up in an electrical company so that's an option SUBURBAN HIGH M10

These quotes suggest pragmatic (Payne, 2003) or utilitarian reasoning about ways, means, convenience and cost that shape that decision-making. These factors were delineated by young people who appeared to exercise agency in decision making (Cuconato & Walther, 2015). Different ways of reasoning about educational pathways took into consideration general societal sentiments which could be articulated directly or were attributed to significant others' influence on their decision-making. For instance, talking about a higher education pathway, one student explained that,

... I think it's like prestige ... at least for my scenario I think Indian households or south east Asian communities think is that it's more prestigious. Having a degree gives you a sense of security whereas TAFE a skilled work is still good like if you want to be a chef you can't really do a degree for it you have to go to TAFE only some occupations have the exception that you don't ... Otherwise if you have to do something, I hate to say respected, but like that is what they ... you have to do a degree. ACADEMIC HIGH F 10/11

Another student highlighted the influence of eventual financial rewards on choosing a pathway:

I was told when I was little like you *have* [emphasis] to go to university because people who went to university will get like paid more than people who went to TAFE. ACADEMIC HIGH F 10/11

Some students combined the perception of status of higher education with financial reward, for example:

... It's kind of just like, I don't know how to say it, but like showing off kind of thing, you become reputable once you get a good degree and a good job ... like a high paying degree ACADEMIC HIGH F 10/11

Other students identified financial reward with a vocational pathway:

[My family] prefer TAFE coz all my brothers have gone to TAFE and it's worked out really well. They want me to be like a welder and a plumber coz that's like where the money is in the future \dots REGIONAL HIGH M 10

Another societal sentiment that resonated in some responses was that of individual authenticity, the idea that people should seek an occupation and pathway that suits their interests and capabilities, as Dewey (1916) proposed earlier.

I'm really lucky. That's what my mum and dad say, whatever makes you happy, just go chase that dream. I'm lucky. REGIONAL HIGH F 10

Again, in identifying post-school pathways, it was more than just the sufficiency of the knowledge available to these young people, but also how they mediated between the distinct kinds of privileging of the social world, generally, and those of familiars and particularly parents, against their personal preferences. Those preferences evolved premediately through finding a fit between what they wanted to do (e.g., dancing) post-school, and the realities of what is possible and whether it would lead to outcomes that were aligned with other personal goals (e.g., clean work, well remunerated employment). So, the suggestion of the social world was mediated (i.e., amplified/muted) by familiars that provided more or less open pathways for these young people to make decisions about post-school pathways.

Suggestions for Informing Post-School Decision-Making

A key goal for this project was how to best inform school-age children comprehensively and impartially about post-school pathways. The students were asked about how school-aged children should be informed in ways that present vocational education as a viable postschool option and also about overcoming negative perceptions of vocational education and the occupations it serves. Several suggestions arose from this part of the interviews. Talking directly to point that children from certain ethnic backgrounds may be expected to favour higher education, one student explained,

I think one of the easiest ways to attract, like, Asian households is to advertise the *job secu*rity [emphasis] they can get from it and the *money* [emphasis] - the money is always important [laughter]. ACADEMIC HIGH M

This recommendation sought to transfer perceptions of the benefits from participating in higher education as something also realisable through vocational education. The two major educational routes should be seen to offer equivalent benefits. A student suggested that access to role models would be effective:

Show someone's [TAFE graduate] who's been really successful in their career. ACADEMIC HIGH M 10/11

One student drew attention to the lack of information about vocational education and related occupations:

Advertise it more, not many people know there's all these courses you can do. SUBURBAN HIGH M10

In a similar vein, another student advocated more discussion of vocational options within the school setting:

Needs to be spoken a lot more in schools instead of all this other stuff they should be more set on careers and stuff. Yeah, be independent, but helping say you can do this and that. SUBURBAN HIGH M10

Other students indicated a lack of information that explains the relationship between educational pathway and particular occupations:

[There is] not enough information [about what to study to get particular jobs]. REGIONAL HIGH F 10

Suggestions about better informing post-school decision making thus referred in some cases to the knowledge base of parents, in others the value of role models, but mostly concerned the nature and relevance of information available to young people themselves. This last point suggests that schools, education systems and governments might improve the mechanisms and quality of advice offered to young people. In particular, it would seem practical, accurate information about what educational pathways lead to what occupations should be offered impartially. This suggestion implies a balanced approach to presenting the benefits of both vocational and higher education as means to securing valued occupational outcomes.

The school students interviewed for this phase of the project give us insight into a complex process of post-school decision-making. The analysis has distinguished reasoning about occupations, varying between firm preference, to preferences for certain kinds of work, to indecision, with tensions between young people and influential familiars seeking to resolve uncertainty into stark choices. This varied in level of clarity from well-informed and realistic to poorly informed, with societal sentiments – e.g., status – playing a role in shaping reflection on occupations and pathways. Evident here were aspects of each of Payne's (2003) three ways of understanding this decision-making process. Suggestions about improving the information and decision-making process to be afforded by educational institutions yielded both useful strategies and reflected current concerns related to lack of clarity about occupations and pathways.

Parents and Post-School Decision-Making

As has been found consistently across studies of young people's decision-making, parents are held to be the single strongest source of influence and direction (e.g. Clement, 2014). Consequently, their perspectives and contributions to that decision-making need to be understood and accounted for within those processes. Interviewees who were parents of current or past senior-year school students presented views about the factors associated with deciding occupations and post-school pathways. In the following data presentation, the parents are indicated by unique number, their gender (i.e., M or F) the school their children attended. They offered reasons for favouring particular post-school options and ideas about which pathways lead to which career outcomes. Many parents expressed the importance of finding a match between the interests and capabilities of young people and post-school options:

Whatever suits them. Not worried about whether university or apprenticeship. Would like them to go into what they are interested in. F- CATHOLIC HIGH Whatever each child is interested in and challenges them we believe would be a good occupation. F45- CATHOLIC HIGH

Jobs that my children enjoy and find meaning in; jobs that suit their lifestyle and personality. F42-REGIONAL HIGH

In this way, these informants appear to place their children's interests and desires ahead of aspirations they themselves might hold or those sanctioned by their social and cultural milieu. Some of these parents, however, had clear views about what suited their children:

Anything that they are good at and they will enjoy doing - one of my children should work with animals and the other in the arts & music. F-REGIONAL HIGH

My child is not suited for this job [solicitor], given his personality and interests. F51-SUBURBAN HIGH

These parents expressed judgements about the alignment between the kinds of work that they believe are appropriate for their children, presumably, based upon their own experiences and preferences. Other parents merged the principle of an intrinsic fit between a young person's interests and post-school pathway with their own values, thereby echoing Dewey's (1916) first stated purpose of education for occupations. That is, finding an occupation that is suited to the young person's interests and capacities, and to avoid them engaging in what he referred to as an uncongenial calling.

I want my children to find a job that makes them happy. One that they are satisfied with. I would love to see them in a job in which they help people e.g., allied health, education, medical, retail. F48-PLAINS HIGH

...I told my two boys there's only two criteria to make your decision. One it will make you happy. Second it will make you proud of yourself Choosing university or TAFE it's about this person and make themselves useful for society. ACADEMIC HIGH-M

Some of these parents presented reasons for choosing post-school pathways that emphasised financial reward and/or favourable work conditions, sometimes combining these values with fit of interests and occupation:

Very rewarding career. Interaction with variety of people. Flexible work hours. Good pay and conditions. Can work in many varied settings. F48-COAST HIGH

Anything that gives them personal satisfaction and a good income. F51-ACADEMIC HIGH

Interesting and variable; making a contribution to the community; opportunities for extending into different areas; working with interesting and committed individuals, F52- ACADEMIC HIGH

When asked to evaluate pathways into occupations, many of these parents positioned education in a vocational institution as an intermediate step on the way to securing entry into higher education:

Depends on circumstances. Going to university and obtaining a degree is a good idea. Any qualification a good idea if TAFE assists to get to university. F45-ACADEMIC HIGH

I have heard that there are TAFE options to get into University. F41-COAST HIGH

These parents valued vocational education primarily in terms of it offering an alternative pathway to higher education, possibly because they believe their children would not be able to secure direct entry. For some parents, vocational education represented both an intrinsically valuable option and an intermediate step to further and usually higher education:

It depends on what they want to do. VETVocational education and training (VET) is a great area as well as it is a stepping-stone. F50- REGIONAL HIGH

A more utilitarian or pragmatic (Payne, 2003) perspective on post-school study was expressed by a few parents. One put the situation succinctly:

Help figure out what job to want, then how to do it. M- REGIONAL HIGH

Another parent explained that,

Successful careers can be obtained from either pathway. F48- CATHOLIC HIGH

Several parents were critical of messages about post-school options presented by schools:

Yeah, they [schools] reckon that TAFE is not good enough and you have to take it one more step. M-ACADEMIC HIGH

...the last school I went to all they did was talk up University and every pathway lead to University. It left people thinking that they need to go to university and that TAFE is not exactly an option. F41- REGIONAL HIGH

I don't remember there being talks about sort of TAFE courses either how they can act as a bridge to get into other courses or the value of those themselves. F52-ACADEMIC HIGH

These messages sometimes positioned vocational education as an option for young people who fail to meet requirements for more societally-desirable pathways:

[Schools] talk about TAFE in the respect that you can use it as a pathway to university if you are not good enough. M-ACADEMIC HIGH They [schools] say that TAFE is like a fallback, M-ACADEMIC HIGH

In terms of recommendations for improving the attractiveness of the vocational education pathway, some parents expressed a need for more information to guide post-school decision-making:

[There is] not enough information. F- REGIONAL HIGH More information in schools. F-ACADEMIC HIGH

Some of these parental recommendations emphasised the need to provide more balanced information about vocational and higher education pathways:

There needs to be a talk for everybody. Teachers, parents, students. Like the talks they do for university. Give a rundown of everything. M-CATHOLIC HIGH

Maybe more about what [VET courses] can lead into. M- REGIONAL HIGH

Other recommendations were for more personal perspectives on where a vocational education can lead:

Show someone's [TAFE graduate] who's been really successful in their career. M-SUBURBAN HIGH

A lot of the universities have great ads ... and you see students themselves off in San Francisco and they make it look really hip and interesting ... so if they [vocational institutions] can do something like that sort of thing, real people and what they're doing. F58-ACADEMIC HIGH

It can be seen from the above that, like students, parents draw upon particular emphases and elements from multiple factors that shape making decisions about preferred occupations, and also the choices of post school pathways available to them. Sitting within this complex of factors are issues of aspiration and concern for children from parents that could be categorised under Payne's (2003) utilitarian model: trying to achieve the best possible outcomes for their children. Here a conundrum is evident with parental desire to achieve the best possible outcomes for their children mediated against some practical concerns associated with fit with the child's capacities. The utilitarian model highlights the tension between consideration of benefits (pursuing aspirations) and more situated factors (knowledge of a young person's strengths and preferences). It is understandable that parents aspire for the best possible outcome for their children in terms of the quality of work, employability and level of remuneration. However, their take on these factors may not be the basis upon which young people ultimately make those decisions. That is, what occupations are aligned with their capacities and interests, consistent with Dewey's (1916) precepts.

Teachers and Post-School Decision-Making

Alongside parents, teachers are consistently reported as influencing young people's decision-making, albeit often unintentionally through utterances they make in class-rooms to students. As noted above, however, much of teachers' advice is premised upon their own personal experience that may not have involved participation in vocational education or the occupations it serves. Hence, given the importance of this group of informants it was useful to capture their perspectives and recommendations. Teachers interviewed for this project discussed post-school decision-making and pathways, with a few expressing frustrations with the academic priorities of the schooling system. Some stated that students are often poorly informed about occupations:

I teach grade 12 engineering here, and I've talked the grade 12 kids about what they think engineering is, and a lot of them were very confused saying "I thought we worked on cars ... all we're doing is theory stuff, when do we actually get to do stuff." They have no idea, don't understand what the words mean. ACADEMIC HIGH-F

In terms of what their jobs would be, I don't think they think about it very much at all. ACADEMIC HIGH-F

Although school students may not know what kinds of activities and interactions comprise particular occupations, they can be guided by general principles or values:

They don't understand what an engineer is, but they do understand that it's a prestigious position. So it's something they want to aim towards. ACADEMIC HIGH-M

... parents want the job to be important, but they can't get the kids to work out the job is important coz the kids don't know what they want to do is the problem ... they're seeing a job as important as high ranking, yeah. REGIONAL HIGH-F

From the kids, they want it to be high paying because they don't want to start at the bottom. REGIONAL HIGH-F

... security ... and I know they say kids now will have 12 different jobs and 5 different careers and I personally think that's sad as a person who has had a career in the one job her whole life... REGIONAL HIGH-F

These teachers' perspectives are, in some ways, quite distinct from those of the parents. Whereas the parents refer to individual children for whom they care, and have more specific focuses, teachers' utterances and suggestions were of a more general kind, reflecting their beliefs about an aggregation of student concerns, aspirations and what is best for them. This was also evident in the suggestions by teachers for having a more informed approach to their students' decision-making about postschool pathways. One strategy was described that suggested lack of knowledge about occupations and pathways favouring higher education as a default position:

They say "I'm going to uni," and it doesn't seem to matter to them what they'll do. [They don't know what they'll do] but they think that's the goal is to just get to uni. ACADEMIC HIGH-M

A lot of the grade 12's will say "I'm going to university" and when you ask what they're going to do they'll say, "I don't know, I'll just do something"... ACADEMIC HIGH-F

How many parents even know what a Cert 1, Cert 2, Cert 3 course [vocational courses] means? If you say, "I'm doing this course to gain entry to university", parents understand, ok this is what we're doing, this is why we're doing it, ACADEMIC HIGH-M

This rationale for choosing higher education over vocational education was explained in greater detail by one teacher:

I feel that while the university degrees are not as precise, that's why they're good. You start in education, then you move into science, then you finish in arts, then you go into applied science. Sure, you jump around, but when you go out you feel, and society feels, that you are capable of a wide array of jobs. That's weakness and the strength of TAFE courses. You're not as capable of as wide array of jobs. But you are *very* [emphasis] capable, perhaps more so, and immediately, of a particular job. So I think that a well-informed student, I'm more than happy for TAFE to be the right choice for them. Whereas I think uni is the right path when they aren't sure what they want to do. ACADEMIC HIGH-M

What becomes clear in this statement is that beyond the societal sentiment that higher education is inherently superior to vocational education, the two major educational pathways are more than alternative means for securing particular occupational ends. That is, higher education can be viewed as the right choice for students who are not certain about educational pathways and/or occupations. Higher education, thus, appears to factor in distinct ways in post-school decision making – in terms of societal sentiments such as social status, in terms of a pathway to secure particular occupational outcomes, and as an institutional setting that allows deferral of occupational choice. On the other hand, the vocational education pathway is beset with adverse sentiments and also the perception that it is best for students who have decided their occupation.

Some teachers distinguished post-school pathways in terms of intrinsic suitedness or fit to particular types of students:

The strength of the TAFE system was that it was a training process. Although we call it vocational education, it's really vocational education and training. That's really what it is. It's about highlighting that this is about practical hands-on learning for practical hands-on learners. Because not everybody is going to learn through an academic system. REGIONAL HIGH-M

Here, a certain kind of learner is envisaged as flourishing in vocational education given perceptions of pedagogical practices characteristic of these institutions. An alternative way of distinguishing pathways was in terms of purposes:

I think TAFE and university serve different purpose. We can't expect [a] student graduated from Bachelor of History or Philosophy [to move directly into a related job], there is [not] a specific job for them. We can't expect TAFE student to have certain wisdom of judgement

beyond their profession. So they serve different purposes and TAFE should [be about] immediate employment opportunity and university different purpose of future think[er]s and future decision-makers. I don't think we should tell TAFE students that "do this so you will have opportunity to go to university". I think this pathway should be open but not the purpose of TAFE. ACADEMIC HIGH-M

This statement reflects a perspective on the general occupational relevance of each of the major pathways: vocational education secures employment, while higher education leads in a more generic direction or somehow equips learners to think in certain ways in future. However, as a few teachers explained, changing priorities of the schooling system pushed students toward a higher education pathway regardless of student interests and abilities or intrinsic purposes of vocational and higher education:

Five years ago, furnishing, construction, and engineering, had huge numbers. Mainly boys. Furnishing became an 'SAS' [i.e., course eligible for university entrance], I thought that was that. Two years ago, I heard this whisper construction and engineering they won't be delivering anymore Whereas now they're doing the SAS non-OP [i.e., courses not eligible for university entrance] so VET's on its way out because of that decision. REGIONAL HIGH-F

The school does not value VET or TAFE at all. One day for graduation I would love to see a plumber up on the stage, or someone who has come back, who is not *traditionally* [emphasis] successful...ACADEMIC HIGH-F

In other words, changes to the rules concerning eligibility to graduate with the Queensland Certificate of Education (QCE – the qualification awarded upon successfully completing senior schooling in Queensland) had made vocational subjects less attractive to students. There was a perception of risk associated with vocational subjects in the context of complex and changing rules for the QCE. Another teacher indicated that in his school there was a tendency to push 'unmotivated' students into vocational subjects:

This idea of university being an overly prestigious option means that we push every single student of *remote* [emphasis] capability to university and now we have the lowest of the low, who are extremely unmotivated, who have not reached academic goals, are going to TAFE. It's the default. ACADEMIC HIGH-M

This quote suggests not only perceptions that certain subjects are to be preferred over others, but that a form of 'streaming' took place that was not necessarily based on student interests, rather on school leadership and system perceptions of level of engagement with schooling. The teachers interviewed for this research offered suggestions for improving the standing of vocational education and occupations it serves. One suggestion involved challenging the mindset that what students decide about post-school pathways is binding for their whole career:

[Seemingly random career path] stories are really good. Tell kids that you start in one job that has nothing to do with what you learnt at school and suddenly you're doing a job you didn't know existed and it takes you to something different. ACADEMIC HIGH-F

Lack of information on educational pathways and occupations was frequently cited as an issue:

The most important thing is information for teacher, parent, student. ACADEMIC HIGH-M

[More information about] what occupations look like, not just job titles. ACADEMIC HIGH-F

[More information about] what they need to get there [to their desired job] and what opportunities are there [availability of those jobs] and what risk to go there. ACADEMIC HIGH-M

A related concern was parent engagement with information sharing opportunities:

You know our biggest problem here is if you come to our subject selection evenings they're so poorly attended [by parents]. That's gone on for years. REGIONAL HIGH-F

Lack of engagement on the part of students was also mentioned that needs to be addressed not only for students' direct benefit, but indirectly for their parents:

There's plenty of information out there ... [students] aren't using the information appropriately. ACADEMIC HIGH-F

Explicit promotion of vocational education pathways was advocated by some teachers:

I think the government could do more to promote TAFE...REGIONAL HIGH-M

Another message that could be promoted concerned the value of all pathways and occupations:

The message that all jobs are important. I think it's a bit of a concern that somehow parents think their children have to go to university and it's a loss of prestige to go to TAFE. I think it's a shame that these are not of equal value. REGIONAL HIGH-M

One teacher explained that a more balanced approach to government financial support for post-school study options would be an effective measure:

I think funding and financial support are very important. I know there's more support to go to university [and] there's very little to go to TAFE. I think funding and equity and access are a very big issue. REGIONAL HIGH-M

In general, teachers presented more sophisticated views than parents on post-school decision making, and how that process could be better-informed. Some of the teacher perspectives also echo what was learned from students and parents, that is, inadequate information about occupations and educational pathways often undermines sound reasoning about occupations and educational pathways. Moreover, in some cases general principles or values, which can mediate societal sentiments, serve as the basis for decision-making. Many of the teachers reported being frustrated with education system policies that tend to favour higher education outcomes and serve to bias post-school decision-making by students and parents. That bias

was presented as something that could run counter to what was in the interests of students and the broader community. Suggestions for boosting the attractiveness of vocational education and the occupations it serves in many cases aligned to what students and parents suggested, for instance, the provision of better and more balanced information. Other suggestions reflected nuanced reasoning about the challenge, such as helping students and parents see that the immediate choice is not likely to be binding. A concerning message was that despite being offered information to guide post-school choices, many students and parents did not engage with that information or opportunities to discuss it. This concern underlines some of the complexity of post-school decision-making, with the process for some guided by historical precedents in families or communities, and/or broader sentiments concerning, for example, perceived status of occupations or authenticity about choices.

A More Informed and Impartial Process of Post-School Decision-Making

The interviews with students, parents and teachers about post-school pathways provided data for understanding perceptions of vocational education and the occupations it serves, influences on post-school decision-making, and formulating strategies for enhancing perceptions of vocational education as a post-school option. A prominent variable observed in the data is the extent to which students, parents and teachers have different levels and kinds of engagement with the range of factors that shape decision-making about post-school educational pathways and occupations. Many students and parents appeared to be drawing on limited or even distorted information. Teachers had a clearer understanding of the relationships between educational pathways and occupations, albeit not necessarily with a balanced perspective. However, many of those interviewed pointed to school system policy that tacitly or explicitly influenced decision-making toward higher education pathways, for example through rules governing eligibility for the culminating senior school qualification (i.e., QCE). Limited or distorted bases for decision-making thus emerges as a problem at several levels, since, for all groups of informants disclosed, such a lack often resulted in a pattern of decision-making that favoured higher education by default. This problem appears an acute one that could be reinforced through lack of engagement with available information by parents and students, even when such information would be useful in overcoming confusion about postschool options and be more balanced in its messaging. This part of our analysis is consistent with research by Clement (2014), Fuller et al. (2014) and Clarke (2015), who each found that limitations on information for post-school decision-making were evident among actors directly involved, with the consequence that choices may be made that do not reflect the interests or capabilities of young people.

Indecision as a Factor Favouring Higher Education

A related theme evident in the interview data was the tendency of indecision about post-school options to favour higher education as a pathway. At the 'transition point' commencing with the approaching end of compulsory schooling (Cuconato & Walther, 2015), students and parents could find themselves relatively unprepared for decision-making about post-school options. In such cases, perceptions that vocational education offers fixed routes to specific occupations could present as unattractive – regardless of student interests and capabilities. These perceptions contrast with those of higher education as an option that does not always demand a firm decision about occupational destination, with some higher education programs that seemingly allow flexibility among broad vocational pathways. In effect, higher education appears to offer indecisive students and parents the opportunity to delay the decision beyond the transition point, removing the potentially stressful demands associated with it. On this point, our research is consistent with Cedefop's (2014) argument about the role of comparison of academic and vocational alternatives when deciding on post-school educational pathways. However, the Australian context may add unique bases of comparison due to the relatively rigid alignment of vocational curriculum with specific occupations (Buchanan et al., 2009). This rigidity may not be evident to decision-makers operating in other national systems and may therefore not be a factor in the process.

Vocational Education as a Pathway

There was a group of students and parents who were more informed about their options, and their decisiveness was often associated with awareness of pathways and endpoints. In these cases, particular vocational and higher education programs were understood to lead in a direct way to desired occupations. For these students and parents, the purpose of post-school education options was conceived in a utilitarian way, as being means to secure certain goals. Sometimes occupations themselves were appraised in utilitarian terms, for example as leading to more stable careers or more financially rewarding careers (or both). This form of decisionmaking may be comprehended in terms of what Payne (2003) calls the 'economic model' under which some calculation of benefits is applied against an investment by students and/or their families. Although this perspective, drawing on human capital theory, is more clearly relevant to decision-making in terms of financial investment and return, non-financial outcomes of investments (which are inevitably financial in some respect) are still comprehended in terms of the theory (McMahon, 2001). Utilitarian thinking about post-school options requires knowledge of options and the relationships amongst them. Nevertheless, viewing post-compulsory education and occupations as means does not imply knowledge of the range of possible educational pathways and occupations. There was evidence that in some cases students who were clearly decided about a vocational or higher education pathway and/or occupational destinations were basing decisions on limited information. For example, basing a decision on perceptions of successful career precedents within the family (precedents that could be based on a vocational or higher education foundation).

Authenticity as a Rationale for Decision-Making

A contrast to utilitarian thinking about pathways and occupations was a distinctive criterion for decision-making described by some students and parents in terms of happiness, passion or personal interest. A desirable post-school option was one that is somehow true to or authentic for the young person. Authenticity as a societal sentiment has been analysed by Taylor (2007), who finds that it is one of the ethical possibilities for individuals in late modern societies. A more personal interpretation of authenticity derives from Dewey's (1916) arguments about the desirability of a fit between an individual's interests and abilities and the demands of particular occupations. The criterion or principle of authenticity was most clearly expressed in relation to occupational or career outcomes but might also be couched in terms of educational pathways that could allow a young person to flourish. The principle of authenticity called for some formulation of goals, although the systematic reasoning about means evident in some student and parent decision-making was not necessarily present. Limited information and indecision about next steps were consistent with a commitment to authenticity. A student might be committed to an occupation whilst uninformed about the educational pathway that would secure that outcome.

Influence of Perceptions of Status

Status of post-school educational pathways and occupations was a factor in the decision-making of some students and parents (Billett, 2014). In many cases, the perception of status was held by parents who might hold firm views about the pathways to be taken by their children. In these instances, societal sentiments about educational pathways and occupations appeared to be mediated by parents since the reference point was future esteem deriving from a perspective on the stratification of society. Opting for higher education was a more obvious decision in the light of this perspective because traditional perceptions of high-status jobs are often those that can only be secured through this pathway. There was some evidence of perceptions of status directed to occupations accessed through vocational education. In these cases, it appeared the source of esteem was the sentiments of a particular family or a particular geographical location in which successful careers were tied to local industries. In this case, familiars comprise the circle of close or proximal influence (Billett et al., 2022b). Thus, perceptions of status could arise from different

sources, from a judgement about societal status to markers of success in a familial or local area setting. Status figured in another way in the data, with negative judgements by teachers or school leadership about the worth of particular kinds of students resulting in pressure on them to undertake vocational subjects. Mechanisms that could lead to this kind of streaming reflect biases against vocational education by those who enact, condone or fail to intervene in such practices. Perceptions of status would operate in a more implicit or abstracted, yet still effective, way in these cases.

Important Interactions in Decision-Making

Two major interactions were discussed by interviewees, between parents and students on the one hand, and on the other between 'the school' and students. The first of these interactions was often discussed in the context of occupational preferences, and most of the utterances referring to these interactions presented student and parents or family agreeing on some option or type of option. Students and parents might speak as though there was agreement about occupations and pathways to them. However, some students alluded to disagreements or unresolved differences with parents. In some cases, there was resolution in favour of the young person although in most it appeared that parent or family expectations took precedence. The second type of interaction seems more abstract, but it was emphasised by teachers who could be taken as possessing 'insider' knowledge and an awareness of how structural processes might work upon student decision making. As indicated earlier, a number of teachers commented on how school system policies and practices served to promote higher education pathways without regard to the interests or strengths of individual students who might otherwise embrace a vocational pathway. These two key interactions were not only important in their own right but appeared to be processes through which societal sentiments or local priorities could influence decision-making.

Improving the Status of Vocational Education

Students, parents and teachers offered suggestions and reflections regarding ways to enhance the standing of vocational education and the occupations it serves. Provision of more comprehensive information about occupations and relevant educational pathways was cited as a need by all groups of informants. Some of the teachers explained that what information there is in schools is weighted toward higher education pathways. That bias could be reflected in marketing materials from universities taking precedence in displays, through to the kind of advice spontaneously offered by teachers who may have little direct knowledge of or experience in vocational education pathways and the occupations they lead to (Fuller et al., 2014).

It appeared that in multiple overt and more subtle ways, positive messaging about higher education predominated in schools, although greater balance was evident in some schools. It is noteworthy that of the State schools referred to here, one has a very strong track record of academic excellence and entry into university that rivals expensive and prestigious private schools (i.e., Academic High), whereas two of the other schools (i.e., Suburban High and Coast High) were highly aspirational schools seeking to enhance their profile as schools with strong university entrance track records. Hence, they, like many of the parents interviewed are aspirational, with those aspirations being directed towards university entrance. Provision of comprehensive and impartial information about occupations and educational pathways appears to be an important measure for addressing limited or unbalanced knowledge bases for post-school decision-making. However, a caveat on this strategy is prompted by the observation of some teachers that there is already enough information and that parents and students do not draw on it, being seemingly fixed in their views on next steps or overwhelmed by indecision and content to defer the difficulties of decision-making.

Interviewees suggested more active promotional strategies, using some form of advertising – television, radio, social media – to reach decision-makers. Indications of messages that could be advanced in this way included positive portrayals of VET pathways and presenting successful careers in occupations served by vocational education, characterised by personal satisfaction, stability and financial returns. Another message was aimed at challenging the perception that decision-making at the transition point in question concerns a binding, whole-of-life decision. The message to be conveyed here that in the contemporary workforce, people will commonly occupy multiple job roles across their careers, may reduce the sense of difficulty about decision-making and encourage greater engagement with available information. Other suggestions related to government and school system policy, such as overcoming inconsistencies in financial support provided to students taking different educational pathways that favour higher education, although it was noted that overall, higher education was a more expensive option than vocational education. These issues are addressed in more detail in Billett et al. (2022a, b).

Understanding the Status of VET Through the Prism of Young-People's Decision-Making

This chapter drew on the findings from Phase 1 of the *Standing of Vocational Education and the Occupations It Serves* research project (undertaken in Queensland, Australia). It highlights the complexity of young people's decision-making about post-school pathways and occupations. The transition point at the end of the course of schooling forces students and parents to make decisions they are not necessarily well-prepared to take. Indecision was found to favour the choice of a higher education pathway. Factors in this kind of decision were perceptions of the strong

alignment of vocational education programs to particular occupations in contrast with perceptions of the relative flexibility of higher education. Students and parents were not only sometimes indecisive but deliberated with potentially limited or distorted information about pathways and occupations. There was evidence that more decisive students and parents reasoned on the basis of more systematic information (e.g. about educational pathways to desired occupations) but this knowledge was not necessarily comprehensive and unbiased. Decision-making sometimes resorted to general principles or sentiments, such as authenticity of occupational or educational pathway choice for the young person, or utilitarian bases such as calculation of financial rewards or favourable work conditions or opportunities, or perceived status of occupations. Teachers interviewed were often better informed about pathways, but in some cases expressed frustration with school system policies that favoured higher education pathways. Students, parents and teachers offered suggestions for enhancing perceptions of vocational education and the occupations it serves that included provision of more information on options; presentation of individuals with successful careers that involved vocational education; and modifying government policy to remove financial disincentives on vocational pathways. The findings reported here shaped the design of Phase 2 of the research where these were verified and elaborated (Choy et al., 2022).

References

- Billett, S. (2014). The standing of vocational education: Sources of its societal esteem and implications for its enactment. *Journal of Vocational Education & Training*, 66(1), 1–21.
- Billett, S., Choy, S., & Hodge, S. (2020). Enhancing the standing of vocational education and the occupations it serves: Australia. *Journal of Vocational Education & Training*, 72(2), 270–296.
- Billett, S., Choy, S., Hodge, S., & Le, A. H. (2022a). Chapter 15: Investigating enhancing the standing of vocational education and the occupation it serves: Purposes, processes and phases. In S. Billett, B. E. Stalder, A. Vibe, S. Choy, S. Hodge, & A. H. Le (Eds.), *The standing of vocational education and the occupations it serves: Current concerns and strategies for enhancing that standing.* Springer Nature.
- Billett, S., Dymock, D., Choy, S., Hodge, S., & Le, A. H. (2022b). Chapter 18: Practical strategies and distributed responsibilities: Enhancing the standing of vocational education and the occupation it serves. In S. Billett, B. E. Stalder, A. Vibe, S. Choy, S. Hodge, & A. H. Le (Eds.), *The standing of vocational education and the occupations it serves: Current concerns and strategies for enhancing that standing*. Springer Nature.
- Buchanan, J., Yu, S., Marginson, S., & Wheelahan, L. (2009). *Education, work and economic renewal*. Workplace Research Centre, University of Sydney.
- Cedefop. (2014). Attractiveness of initial vocational education and training: Identifying what matters. Luxembourg: Cedefop Publication.
- Choy, S., Le, A. H., Billett, S., & Hodge, S. (2022). Chapter 17: Surveys of students, parents and teachers (Phase 2). In S. Billett, B. E. Stalder, A. Vibe, S. Choy, S. Hodge, & A. H. Le (Eds.), *The standing of vocational education and the occupations it serves: Current concerns and strategies for enhancing that standing*. Springer Nature.
- Clarke, K. (2015). Careers education must be for all, not just those going to university. *The Conversation*. Retreived from https://theconversation.com/careers-education-must-be-for-all-not-just-those-going-to-university-49217

- Clement, U. (2014). *Improving the image of technical and vocational education and training*. Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH.
- Cuconato, M., & Walther, A. (2015). 'Doing transitions' in education. *International Journal of Qualitative Studies in Education*, 28(3), 283–296.
- Dewey, J. (1916). Education and democracy. The Free Press.
- Fuller, C., McCrum, E., & Macfadyen, T. (2014). Teachers' knowledge and experiences of information advice and guidance: Some implications for the current policy context in England. *Education Inquiry*, 5(22), 23922.
- Harvey, L. (2007). The epistemology of quality. Perspectives in Education, 25(3), 1–13.
- Joyce, S. (2019). Strengthening skills: Expert review of Australia's vocational education and training system. Australian Government.
- McMahon, W. W. (2001). The impact of human capital on non-market outcomes and feedbacks on economic development. In J. Helliwell (Ed.), *The contribution of human and social capital to sustained economic growth and Well-being* (pp. 136–171). OECD.
- Nakar, S., Bagnall, R. G., & Hodge, S. (2018). A reflective account of the VET FEE-HELP initiative as a driver of ethical dilemmas for vocational education teachers in Australia. *The Australian Educational Researcher*, 45(3), 383–400.
- Noonan, P., & Pilcher, S. (2018). *Participation in tertiary education in Australia: Modelling and scenario analysis*. Mitchell Institute, Victoria University.
- Payne, J. (2003). Choice at the end of compulsory schooling: A research review. Department for Education and Skills Publications.
- Smith, E., & Keating, J. (2003). From training reform to training packages. Social Science Press. Taylor, C. (2007). A secular age. Harvard University Press.
- UNESCO-UNEVOC. (2018). Short summary of the Virtual Conference on improving the image of TVET: Making TVET attractive to youth. Retrieved from https://vocationsandlearning.files. wordpress.com/2019/10/vc_synthesis_21_final.pdf
- Valsiner, J. (1998). The guided mind: A sociogenetic approach to personality. Harvard University Press.
- Warburton, M. (2016). The VET FEE-HELP debacle: Helping its victims and lessons for administration. Carlton, Victoria: LH Martin Institute.

Chapter 17 Surveys of Students, Parents and Teachers (Phase 2)



Sarojni Choy, Anh Hai Le, Steven Hodge, and Stephen Billett

Abstract The low standing of vocational education and training (VET) generates reluctance amongst young people and their parents to consider VET as a viable post-school option. A survey was developed and administered to verify and elaborate the findings from an earlier round of interviews. In all, 168 school-aged students, 148 schoolteachers, 296 vocational educators and 230 parents completed the online survey. They ranked (i) important factors in decision-making about postschool pathways; (ii) the influence of familiars on school students' decision-making about study pathways and preferred occupations; (iii) important messages to promote the standing of vocational education; and (iv) effective presentations of informed and positive messages. The findings indicate differences in perspectives between the school-aged students and their adult counterparts (i.e., parents, teachers or other familiars). These findings highlighted information about utility, authenticity and status of VET as being effective when communicating about VET to make informed decisions. They also draw attention to the importance of providing accurate details and model examples about VET and the occupations it serves. More tailored strategies to reach individual goals were sought by students and parents (see Billett et al., Chap. 18).

Keywords Vocational education and training · Post school · Decision making · Survey · Influencers · Career choice · Student preferences · Parents · Teachers · Australia

S. Choy (\boxtimes) · A. Hai Le · S. Hodge · S. Billett School of Education and Professional Studies, Griffith University, Brisbane, QLD, Australia e-mail: s.choy@griffith.edu.au

Enhancing the Standing of Vocational Education

When commencing working life, the standing of tertiary education qualifications sets the pace for successful careers (Stalder & Lüthi, 2020). Securing university qualifications are consistently given precedence over those from vocational education and training (VET) because of its enduring low standing (e.g., Billett, 2014; Cedefop, 2017; Noonan & Pilcher, 2018). This is the case even when VET remains the only option for those who do not meet the entry requirements for universities. The rationale for enhancing the standing of VET is advanced in Billett et al. (2022a). The authors highlight how the low standing of VET manifests and go on to clarify the implications for raising the standing of this sector to fulfil training and development of young people as skilled workers. The current decline in interest and low uptake of VET as a post-school pathway is well recognized as a global phenomenon (Billett, 2014; UNESCO-UNEVOC, 2018). This decline ensues from multiple, complex factors that shape decision making. These include influence of familiars as well as messages that young people receive through social media. Indeed, the personal-social foundations underpinning VET choices are complex and manyfold. It becomes important, therefore, to ensure that students have clear, well informed, up-to-date and impartial information and advice about realistic educational requirements for VET related occupations including less study debt, potential for strong monetary returns, early completion for employment and pathways for further studies and transitions into new occupations (Hargreaves & Osborne, 2017). So, even when demands for 21st century skills most needed are developed through VET provisions, societal standing remains low. Consequently, impartial, balanced and independent guidance is needed regarding possibilities and reasonableness at a time when students are preparing to enter the social and institutional systems of VET or university education. It, therefore, becomes necessary to understand the factors that shape young people's decision making about post school pathways and ways to enhance the standing and engagement in VET. In this chapter, we report the findings of a survey designed to verify and elaborate influences on decision making about pathways and preferred occupations; and the messages and ways to present these to promote the standing of vocational education.

Perspectives on Decision-Making About Post-school Pathways

The process of individuals identifying their preferred calling and occupation (Dewey, 1916) is integral at the start of successful preparations for initial employment and future careers, hence demands well informed decision making. Nonetheless, decisions about future occupations, careers and study pathways are socially constructed. That is, other than input and influences by proximal informants with varying levels of knowledge about and experiences of VET (Clement, 2014) there are other factors that sway how decisions are made by young people.

The survey findings reported and discussed here highlight the factors and potential changes that might promote the standing of VET. The survey was part of a large project conducted in the state of Queensland, Australia.

Important Factors in Decision-Making About Post-school Pathways

Post-school pathways lead to careers that are socially and culturally constructed, often shaped by the fit between the person and occupation. Billett et al. (2022c) acknowledge a complex of intertwined and interdependent personal practices of young people, their familiars and institutional and societal factors (i.e., implicit and explicit) that influence their decisions away from VET towards university as a postschool pathway. The institutional or societal factors shaping these processes of decision-making include labour market conditions, tertiary education policy and opportunities, societal status of post-school options, societal status of occupations, geographical location, and factors associated with gender (Billett et al., 2022b). For example, geographical locations and job availability in the region could be determining factors (Webb et al., 2015) in both attracting and resisting ways. For instance, those wishing to stay in their local community may have restricted options, while others may extend their options by moving to places where they can study their preferred courses. Furthermore, access to opportunities, such as apprenticeships or traineeships may also steer students towards a VET pathway to secure employment locally.

It is noteworthy that these institutional factors are commonly projected by society and make suggestions about what kinds of works that are available and what occupations and pathways are considered worthy by young people and their parents. It is noted that existing educational policies and practices privilege higher education as being more desirable than vocational education (Cedefop, 2017; Clement, 2014; UNESCO-UNEVOC, 2018). Importantly, how these societal suggestions are engaged with and practised by young people, their parents and other familiars has influenced their decision-making about post-school pathways. The main mediating factors when considering VET or university as a pathway include young people's performance in school, social backgrounds, personal preferences and career aspirations (Fuller & MacFadyen, 2012). Workman (2015) reports that parental and family history, aspirations and expectations drive the choice for a university qualification (Workman, 2015). In other words, a post-school pathway is not necessarily an individual decision.

In the main, young people's decisions to consider VET as a post school pathway are influenced by personal and societal/institutional factors. Personal factors include capacities, aspirations, preferences, current performance at school, affordability, parental/family histories, situations and expectations, future prospects, lifestyle options and personal curriculum (Choy et al., 2021). Societal/institutional factors

include educational policies and practices around the curriculum and fees, status of occupations and educative support. For some students, suggestions of proximal informants and community sentiments prompted decisions that were not always what they preferred.

Influences on Decision-Making About Pathways and Preferred Occupations

Recent research across a range of countries has contributed to our understanding of the implications of and key influences on school aged students' decision-making about post-secondary education to prepare for employment and careers. In Europe, parents, schoolteachers, work experience and school guidance officers (Clement, 2014) have important but varying degrees of influences on young people's decisionmaking about post-school pathways. Parental practices and influences were reported as the strongest predictors of occupational aspirations of young people. According to Gemici et al. (2014), students whose parents expect them to attend university tend to aspire to higher status occupations than those whose parents had no university expectations for them. In Australia, young people's reliance on families as sources of information and support were particularly evident in young Aboriginal and Torres Strait Islander people, those from rural and remote communities, and those from refugee and migrant backgrounds (Bowen & Kidd, 2017). In a more recent study parents or family members were seen to be the main sources of information about careers, followed by teachers, school staff and peers or friends (Billett et al., 2020). Indeed, parents are also seen as sincere sources of advice. However, their aspirations for happiness, good education, high paying jobs and ongoing employment (Haywood & Scullion, 2018) may sometimes conflict with their children's interests and abilities.

Outside of the family environment, everyday classroom interactions with teachers introduce conversations and discussions about post-school option which appear to be influential. Baxter (2017) found that students are more likely to discuss their future plans with teachers than with school guidance or career counsellors because they have more frequent interactions with subject teachers compared to other school staff. However, research (e.g., by Fuller et al., 2014; Ofsted, 2010) indicate that most teachers are knowledgeable about and have experiences in the schooling and higher education sectors and are well informed to advice about those educational pathways. Their limited or lack of experience in VET, however, means the quality of advice they provide may be based mainly on what they read or acquired from others (Clarke, 2015). Yet, students often regard these teachers as credible sources of information (Clement, 2014). Teachers and other school leaders are promoting universities and certain programs that lead to selected careers to improve school rankings (Clarke, 2015). Schools in high socioeconomic regions give precedence to university pathways respectively (Foskett et al., 2008). The sample of schools in

non-metropolitan areas reportedly gave greater consideration to VET because they provide work experiences as part of the curriculum (Choy et al., 2021).

So, not all of those who are influential are well informed when providing advice to young people (Matthews, 2014). Billett et al. (2020) conclude that teachers and parents appear to underestimate their influence whilst overestimating that of school counsellors on young people's decision-making about future career options. There is only partial understanding of the significance of the influence by proximal informants (e.g., parents, teachers etc) and other factors that influence young people's decisions about post school pathways. Yet, these have a major bearing on young people's future study pathways and careers. As such, they need to be provided with accurate, clear and timely information to make informed decisions. As reported earlier, school students have access to a lot of information on university pathways but not as much about VET because the standing of VET remains low. The next section discusses messages to promote the standing of VET.

Messages to Promote the Standing of Vocational Education

Students receive intended and unintended suggestions about post-school pathways from a variety of sources including teachers and career advisors, family, and friends, and general and social media. Career advisers offer generic information, not specific post school options or VET. There are also print-based and online resources that vigorously market higher education as a preferred post-schooling option, arguing it offers flexibility and leads to occupations that are stable, clean, well-paid and have higher status. So, there are many sources of information and students are generally well-informed about university as a pathway because they receive ample information about this option although they sometimes feel overwhelmed and confused (Choy et al., 2021; Matthews, 2014). That is, they need help to process the information they receive and align with their interests and capacities. Furthermore, students also need opportunities to experience the realities of different occupations before they decide on which pathway to pursue.

While information about university pathways into careers is well regarded, there is a stigma about VET because it is often portrayed as being more appropriate for those who do not meet the requirements for direct entry into university. Such suggestions undermine VET as a pathway even if the occupations it serves can lead to better monetary returns, lower study debts, and as firm foundation for future development (Hargreaves & Osborne, 2017). Bisson and Stubley (2017) call for messages with more positive views about VET to be introduced in the early years of schooling and not be left to the final years in high school. Billett et al. (2020) suggest messages that are impartial and inclusive – regardless of hierarchies of status assigned to occupations and individual or parental aspirations. Choy et al. (2021) identified three features of VET that students in their study suggested will attract their interest. These are utility (as indicated by ranking of 'Future job security and stability, High-paying work in the future, Future prospects, Other lifestyle benefits

(e.g., travel)'), authenticity (as indicated by ranking of 'Status of the future occupation' and 'Status of the qualification') and status of VET (as indicated by ranking of 'Future job satisfaction' and 'Personal interests and passions'). The rankings suggest that students consider authenticity and utility of a future career as being more important than its status. That is, the practicality or practical value of an occupation is of greater importance to students, along with its scope for self-realisation.

Effective Presentations of Informed and Positive Messages

There is limited research commentary in the literature about effective presentation of materials to enhance the standing of VET. Choy et al. (2021) report students' recognitions of three modes of information dissemination: dynamic channels, static channels and school sites. School students valued personalised career information about VET, exposure to a range of VET experiences when in school and exposure to different VET institutions. They also suggested inviting experienced teachers from VET institutions to give talks in the school.

As reported in literature, only limited and impartial information about VET is provided to young people (Clement, 2014; UNESCO-UNEVOC, 2018). Decision making is deeply influenced by implicit expectations of parents, schoolteachers and other familiars (Clement, 2014; Fuller et al., 2014). Australian students, for example, were reported to possess outdated perceptions of the vocational education sector (Gore et al., 2017). They were sometimes confused and had unrealistic expectations of the educational requirements for VET-related occupations (Gore et al., 2017; Hargreaves & Osborne, 2017). These studies suggest that young people would benefit from detailed information and exposure to VET occupations earlier than the final years of schooling. The use of specially designed tool to gather interests and consider suitability can help individuals direct their efforts to suit personal circumstances. Targeted and sustained policy and resourcing is needed to enhance the standing of VET and the occupations it serves.

A review of literature shows that very few studies (e.g., Gore et al., 2017; Maxwell et al., 2000; Webb et al., 2015) suggest ways to raise the standing of VET. What kinds of messages best promote the standing of vocational education; how can such messages be presented effectively and positively; what are the important factors in decision-making about post-school pathways, and what are the influences of familiars on school students' decision-making about pathways and preferred occupations? These are the questions that formed the basis for a recent study in Australia. Part of that study included a survey with students, parents and teachers to gather their perspectives on factors that shape decision making about post-school pathways, and messages to enhance the standing of VET and the occupations it serves. The next section reports and discusses the findings of that survey.

Survey with Students, Parents and Teachers about Post-school Pathways

The processes and findings described and reported in this chapter are those derived from descriptive analyses of the survey phase (Phase 2) of a larger Australian project seeking to understand the factors shaping young people's decision-making processes associated with post-school pathways and to identify the kinds of interventions that might be helpful in presenting vocational education as a viable pathway (see Chap. 15). The online survey was administered to a broader population of parents, school and vocational education students and vocational educators to verify and elaborate findings from Phase 1 interviews with schoolteachers and parents of high school-aged children, and focus groups with school students. The survey items consisted of a series of multiple-choice, and Likert-scaled questions. Five-point Likert scales were used to measure (i) levels of importance on factors in decision-making about post-school pathways, (ii) levels of influence of familiars on school students' decision-making about those pathways and preferred occupations, (iii) levels of importance on messages to promote the standing of vocational education, and (iv) levels of effectiveness with presentations of informed and positive messages. Table 17.1 provides some examples of the survey questions/items.

The administration and distribution of the survey was facilitated through school and institutional contacts and through social media. Incentives in the form of prizes were included and described in the information about the survey. Students aged

Table 17.	 Examp 	les of survey	y questions/items
-----------	---------------------------	---------------	-------------------

Survey section	Sample question/item	Question type
Demographics	Please indicate your age grouping	Multiple choice
	Choose ONE of the following that best represents you	Multiple choice
Factors in decision-making about post-school pathways	'Future job security and stability'	Likert-scales (1 = not at all important to 5 = extremely
	'Personal interests and passions'	important)
Influences of different	'School teachers'	Likert-scales (1 = not at all
stakeholders on decision-making	'Parents'	influential to $5 = \text{extremely}$
about post-school pathways	'Students themselves'	influential)
Messages promoting the standing of vocational education	'Students can study a wide range of courses'	Likert-scales (1 = not at all important to 5 = extremely
	'It can be a stepping-stone to university'	important)
Presentations of informed and positive messages	'Wide advertising (e.g., TV, radio, social media)'	Likert-scales (1 = not at all effective to 5 = extremely
	'Schools providing more personalised career information about VET jobs'	effective)

below 18 years were required to obtain parental permission before participating in the online survey. They did this by obtaining parental consent on paper copies and returning to the school contact person before they were allowed access to the online survey. Complete survey data were obtained from 168 school students, 148 school-teachers, 296 VET teachers and 230 parents (excluding those identifying themselves as VET teachers or schoolteachers). The findings described and reported here are those derived from descriptive and inferential (i.e., Chi-square test) analyses of the survey, with a particular focus on perspectives of school students in comparison with other adult respondent groups (i.e., schoolteachers, parents, and VET teachers). Comparative weightings using mean scores within each cohort are represented through rankings. The findings of the survey are reported under four sections.

Key Factors in Decision-Making About Post-school Pathways

The respondent groups rated the importance of desired outcomes for young people when considering post-school pathways. These data are presented in Table 17.2. In the left-hand column, is a ranked list of desired outcomes from post-school pathways, based on school students' ratings. The subsequent columns show rankings of mean scores of responses from students, schoolteachers, parents, and VET teachers as well as % of response for option 'extremely important'.

Whilst school students rated 'Future job satisfaction' as their most desired outcome, this was rated second by schoolteachers, parents and VET teachers. Their most highly rated outcome was 'Personal interests and passions', which was rated third by school students.

It is worth noting that 'status of the qualification' is the only desired outcome which had the same rating – the lowest ranking – by all participants. This suggests a VET qualification is not attractive in setting the pace for successful careers, which contrasts to Stalder and Lüthi's (2020) finding in the Swiss context. On other desired

	School	School		School			VET	
	students	3	teachers		Parent		ts teacher	
Desired outcomes	Rank	%	Rank	%	Rank	%	Rank	%
Future job satisfaction	1	47.7	2	32.6	2	20.9	2	47.0
Future job security and stability	2	45.5	4	61.5	4	55.1	4	28.0
Personal interests and passions	3	44.2	1	6.8	1	11.1	1	47.7
High-paying work in the future	4	35.9	6	12.7	6	16.8	5	18.7
Future prospects	5	24.5	3	58.5	3	52.2	3	32.6
Status of the future occupation	6	22.6	7	20.7	7	16.1	7	16.5
Other lifestyle benefits (e.g., travel)	7	27.6	5	42.2	5	34.1	6	19.8
Status of the qualification	8	43.2	8	21.1	8	21.4	8	10.5

Table 17.2 Ranking of desired outcomes from post-school pathways

outcomes, there was variance in the ranking by students and other informants. That is, while adult informants' (parents and teachers) ratings were similar for six (out of eight) of the listed outcomes, they were different to how students rated the desired outcomes.

Interestingly, these desired outcomes are positioned to be of value to young people, and adult groups' ratings of them indicate the degree by which their advice is aligned with what is perceived. Yet, evident here is the disparity between school students' and adult groups' rating of several outcomes. For example, as noted, whilst 'Personal interests and passions' and 'Future prospects' were rated highly by the adult groups (1st and 3rd respectively), they were not considered among the most desired outcomes by students who rate these 3rd and 5th, respectively. A statistically significant difference between groups ($\chi^2 = 26.576$, p = .009) was found on the former, with 79.5% of school students indicating high level of importance (i.e., very and extremely important) of 'personal interests and passions' compared to 94.1% of schoolteachers, 92% of parents, and 88.1% of VET teachers. Table 17.3 shows the group differences in responses to 'Personal interests and passions' and 'Future job security and stability'. In this table, the desired outcomes recording significant difference on a Chi-square test are listed in the left-hand column, the second column from the left compares the groups' responses. Statistical evidence, including sample size for each respondent group (n), percentages of response options and the probability associated with the test statistic (i.e., p value), is presented in the right-hand columns.

Whilst the student respondents considered 'Future job security and stability' to be an important desired outcome (i.e., rated 2nd), the adult group rated it 4th. Again, a significant difference was recorded on this desired outcome ($\chi^2 = 53.074$, p < .001), with 45.5% of school student respondents considering 'future job security and stability' to be an extremely important outcome in comparison to only 32.6% of schoolteachers, 20.9% of parents, and 28% of VET teachers respectively, indicating similarly strong preference. These differences suggest that perceptions of what could be the desired outcomes from post-school pathways for young people are not

			% o	% of responses				
Desired outcomes	Group	n	NI	SI	MI	VI	EI	p
Future job security and stability	School student	156	1.3	1.3	7.7	44.2	45.5	.000***
	School teacher	135	1.5	3.7	25.9	36.3	32.6	
	Parent	225	2.7	5.8	30.2	40.4	20.9	
	VET teacher	286	0.7	6.6	26.9	37.8	28.0	
Personal interests and passions	School student	156	1.9	2.6	16.0	35.3	44.2	.009**
	School teacher	135	0.7	1.5	3.7	32.6	61.5	
	Parent	225	0.9	0.4	6.7	36.9	55.1	
	VET teacher	287	0.7	2.1	9.1	40.4	47.7	1

Table 17.3 Group differences on desired outcomes when considering post school pathways

Note: *** denotes p < .001, **p < .01; NI = Not at all important, SI = Slightly important, MI = Moderately important, VI = Very important, EI = Extremely important

fully appreciated by these adults. This finding from the survey supports Billett's (2020) claims on a growing preference by young people for a university education more than of vocational education.

The survey data are limited in explaining what other factors influence desired outcomes, however. That is, whether parents' perceptions of support, young peoples' perceptions of support from parents (Ginevra et al., 2015); socio-economic standing (Homel & Ryan, 2014; Krause et al., 2009); social and cultural environments of students and educational background of parents (Chesters, 2015); or language backgrounds (Galliott et al., 2015) influence the decisions about desired outcomes of vocational education. These details were not gathered in the survey. Nonetheless, the finding emphasises the importance of assisting young people to identify the personal interests and passions or occupation to which they are most suited (Dewey, 1916). The findings here also indicate that the adult cohorts rated desirable post-school outcomes for young people in ways that diverged from ratings by young people. This divergence implies that the bases on which adults, including parents and teachers, provide advice is not necessarily consistent with the goals of young people. Yet, it is these adults who are most likely to influence young people's decision-making about post-school pathways. The next section reports and discusses findings about influences on decision making about post school pathways.

Influences on Decision-Making About Post-school Pathways

The respondents were asked to rate the influence of different stakeholders on young people's decision-making about further study and future careers. They rated the influence of immediate/extended family', schoolteachers/guidance officers, and media. Table 17.4 compares the relative ratings. The factors that influence the decision-making are listed in the left column, and in columns to its right are the

Table 17.4	Ranking of influences	on decision-making	about post-school pathways

	School students			chool achers				ts	VET teacher	rs
Influences on decision-making	Rank	%	Rank	%	Rank	%	Rank	%		
The students themselves	1	41.1	2	43.0	1	38.4	2	36.9		
Immediate family (such as parents, carers, siblings)	2	29.1	1	43.0	2	34.8	1	33.1		
School teachers	3	21.5	5	20.1	4	23.7	4	24.6		
School guidance officers	4	20.3	4	23.9	5	24.6	5	26.0		
Students' friends	5	7.0	3	31.1	3	29.0	3	30.2		
Extended family	6	4.4	7	4.4	8	6.3	7	10.8		
Entertainment media such as movies and TV shows	7	8.9	6	20.7	6	19.2	6	19.0		
Other media such as news stories	8	6.3	8	7.5	7	9.0	8	12.1		

rankings based on the mean scores of responses from the respondent groups as well as % of response option of 'extremely influential'.

What can be seen in Table 17.4 is a general agreement on items at both the top and bottom of the list. Immediate family, including parents, carers and siblings, are rated either first or second influences on young people's decision-making about post-school pathways. The finding here is congruent with most studies that have investigated the role played by family, particularly parents, in decision-making (Baxter, 2017; Bowen & Kidd, 2017; Brown, 2017; Clement, 2014). As shown in Table 17.4, students indicated themselves as 'extremely influential' (41.1%) in the decision-making process, far more than the influence from other actors.

Interestingly, peers (i.e., students' friends) are considered moderately influential (rated 3rd) by the adult groups, but less influential (rated 5th) by the students themselves. Only 7% of school student respondents rated their peers to be extremely influential, whereas much higher percentages of the adult groups rated influence of students' friends in similar ways (31.1% of schoolteachers, 29% of parents, and 30.2% of VET teachers, $\chi^2 = 121.842$, p < .001). This finding contrasts with Gemici et al.'s (2014) reporting on peer influence as an explanatory variation about choice. They suggested that students whose friends planned to attend university were much more likely to plan to attend university themselves.

Although not evident in the rankings (i.e., a large disparity in rankings between respondent groups), it is worth noting a significant difference between school students' rating of the influence of media and that of adult groups (p < .001). A small percentage of school students rated either 'Entertainment media such as movies and TV shows' (27.4%) or 'Other media such as new stories' (19%) as very and extremely influential on decision-making about post-school pathways. A much higher percentage of the adult group rated media as an influential factor. That is, approximately 51% or more of the adult groups rated the high influence of entertainment media, compared to only 27.4% of school students, as shown in Table 17.5.

The responses of students and adults again highlight a mismatch in ranking by school students and the adult group about the key influences when considering post-school pathways. The finding here reinforces Haybi-Barak and Shoshana's (2020) doubts about the efficacy of social media marketing of vocational education in the broad context of a lower social standing of vocational education and the occupations it serves. Furthermore, influence of peers and media on young people's decision-making about post-school pathways might be misleading. The expression of personal preference of the adult group was seemingly predominant, rather than conscious efforts to be impartial about diverse post-school pathways. That is, the advice adults have given to students is often based on their preference arising from personal experiences (*see* Hodge et al., 2022) instead of being informed by knowledge and understanding about diverse post-school options and pathways.

			% of	respo	nses			
Key influences	Group	n	NI	SI	MI	VI	EI	p
Students' friends	School student	158	5.7	16.5	44.3	26.6	7.0	.000***
	School teacher	135	0.0	4.4	23.7	40.7	31.1	
	Parent	224	2.2	3.6	16.5	48.7	29.0	
	VET teacher	288	0.0	3.8	22.9	43.1	30.2	
Entertainment media such as movies and TV shows	School student	157	10.8	33.8	28.0	18.5	8.9	.000***
	School teacher	135	1.5	11.1	34.8	31.9	20.7	
	Parent	224	3.6	9.4	36.2	31.7	19.2	
	VET teacher	284	2.8	12.7	27.8	37.7	19.0	
Other media such as news stories	School student	158	13.3	35.4	32.3	12.7	6.3	.000***
	School teacher	134	3.7	18.7	43.3	26.9	7.5	
	Parent	222	3.6	15.8	42.8	28.8	9.0	1
	VET	281	2.1	17.8	38.8	29.2	12.1	

Table 17.5 Group differences on key influences when considering post-school pathways

Note: *** denotes p < .001; **NI** = Not at all important, **SI** = Slightly important, **MI** = Moderately important, **VI** = Very important, **EI** = Extremely important

Messages Promoting the Standing of Vocational Education

The next part of the survey investigated participants' views about the importance of messages that would encourage young people to consider VET as a post-school pathway. The survey respondents were asked to rate the importance of a list of messages that could be communicated to school students to encourage them to consider vocational education as a worthwhile and viable post-school pathway. The analysis is presented in Table 17.6, which ranks the mean scores of responses from school students, schoolteachers, parents and VET teachers. In this table, the messages are listed in the left-hand column. The ranking of the mean scores of responses from school students are in the second column from the left and those of the adult groups are in subsequent columns as well as % of response option 'extremely important'.

It can be seen in Table 17.6 that ratings by the adult groups are congruent for several messages such as 'It can be a stepping-stone to university' and 'Students can study a wide range of courses'. However, there is a disparity between the rating of these messages by school students and what the adult cohort suggests. This suggests that students and adults may interpret and value the messages in different ways. Certain messages are favoured differently by individuals who influence students' decision-making about post-school pathways. This implies potential practical

	School		School				VET	
	students t		teachers	teachers		Parents		rs
Messages	Rank	%	Rank	%	Rank	%	Rank	%
Is delivered in a friendly learning environment	1	42.6	7	39.9	7	52	8	51.9
Courses are easy to get into	2	25.3	2	24.8	4	26.5	6	28.2
Leads to good job prospects	3	43.2	6	60.8	8	59.6	10	55.5
It can be a stepping-stone to university	4	27.5	1	54.9	2	38.1	1	32.2
Courses suit all genders	5	53.7	9	39.2	5	43.5	3	44.6
It is a high-quality, well-respected post-school option	6	32.1	5	53.8	3	62.1	4	59.5
Is a good option for smart students	7	13	10	28	9	34.4	9	30.9
Leads to well-paid jobs	8	47.2	8	42	5	40.4	5	35.9
Students can study a wide range of courses	9	46.3	2	51.7	1	55	2	45.9
Leads to stable jobs	10	50.6	4	43.4	11	43.8	11	40.3
Leads to interesting and worthwhile jobs	11	42	12	53.9	13	53.9	13	49.3
Classes are practical	12	34.8	11	41.3	9	45.9	7	47.1
Is a good first-choice	13	14 9	13	27.3	12.	39 9	12	40.2

Table 17.6 Ranking of messages to encourage young people to engage in vocational education

 Table 17.7
 Group differences on messages to encourage young people to engage in vocational education

			% of responses					
Messages	Group	n	NI	SI	MI	VI	EI	p
It can be a stepping-stone to university	School student	160	1.3	2.5	25.0	43.8	27.5	.000***
	School teacher	142	0.7	1.4	13.4	29.6	54.9	
	Parent	226	0.9	4.0	24.3	32.7	38.1	
	VET teacher	292	1.0	5.8	22.6	38.4	32.2	
Classes are practical	School student	161	1.2	1.9	22.4	39.8	34.8	.000***
	School teacher	143	0.7	4.2	18.2	35.7	41.3	
	Parent	229	0.9	1.3	5.7	46.3	45.9	
	VET teacher	291	0.7	2.4	10.0	39.9	47.1	

Note: *** denotes p < .001; NI = Not at all important, SI = Slightly important, MI = Moderately important, VI = Very important, EI = Extremely important

implications arising from such differences. For instance, the differences might lead to distorting interpretations, subsequently, confusions when making decisions. It is also worth noting a significant difference ($\chi^2 = 36.598$, p < .001) in the response pattern of schoolteachers (54.9%) as compared to others (38% or less) in rating the importance of the message, 'a stepping-stone to university' (see Table 17.7). The

finding here aligns with Hay and Sim's (2012) reporting on teachers' personal preferences for higher education, and vocational education as just a stepping-stone to university entrance and not a direct and legitimate post-school career pathway in its own right. In Table 17.7, the left-hand column lists the messages. The second column from the left presents the respondent groups. Statistical evidence, including sample size for each respondent group (n), percentages of response and the probability associated with the test statistic (i.e., p value), is presented in the right-hand columns.

A VET option is attractive for some students who view it as an option when they are not able to gain direct entry into higher education (Cedefop, 2017). Whilst VET teachers – who are assumed to be in a better position to judge the messages relating to vocational courses (i.e., Courses are easy to get into) and classes (i.e., Classes are practical) – assigned an average ranking (6th and 7th out of 13) for these messages, the other groups expressed different rating. For example, school students and teachers rated the message relating to ease of entry into vocational courses highly (i.e., 2nd) and gave a low rating to the importance of the message relating to the practicality of vocational classes (i.e., 12th for school students and 11th for schoolteachers). A statistically significant difference was noted within groups ($\chi^2 = 36.598$, p < .001). Only 34.8% of school students considered this extremely important, compared to the adult group (47.1% of VET teachers, 41.3% of schoolteachers, 45.9% of parents). Such a finding supports that of Fuller et al. (2014). They reported that whilst both teachers and parents are influential in young people's decision-making, many teachers have insufficient knowledge and experience outside of their own careers. Some parents on the other hand are hampered by their limited knowledge, engagement and direction about VET (Bisson & Stubley, 2017; Lamb et al., 2018) to provide informed advice.

Importantly, whereas these student respondents valued the message about vocational education being 'delivered in a friendly learning environment' (i.e., ranked 1st) and privilege post-school pathways leading to 'good job prospects' (i.e., ranked 3rd), schoolteachers were less supportive of these messages (i.e., ranked 7th and 6th respectively) as were VET teachers (i.e., 8th and 10th) and parents (i.e., 7th and 8th). Such discrepancies indicate generational variations wherein adults seem to lack understanding of what young people perceive to be an attractive characteristic of vocational education as a post-school pathway. This finding resonates with Aarkrog's (2020) observation on generational differences in the approach to selecting occupations. Notably, vocational educators' own education and work life experiences do not lead to a difference between their perspectives and those of other adult informants.

The findings of the survey also point towards practical implications arising from differences in the ratings by school students and those of other adults in the study and how these differences might lead to distortion of the decision-making process and, potentially, constraints on decision-making of school students. So, the question about how best to present more informed and positive messages come to the fore in the analyses of these data.

Presentations of Informed and Positive Messages

The respondents were requested to rate the effectiveness of a list of means for presenting positive messages about VET in terms of the likely effectiveness of those measures. The ranked responses as well as % of response option 'extremely effective' are presented in Table 17.8. As in the other tables, the students' rating is used to order the presentation of the data.

There is some consensus in the ratings of how messages about enhancing the worth of vocational education should be projected by the different respondent groups. What appeared to be common about these responses is that the means that can be experienced directly and mediated (i.e., 'Schools providing more personalised career information' and 'Exposure to a range of work situations while still at school') were deemed to be more effective than those that were not mediated by respondents (i.e., 'online materials', 'wide advertising' and 'printed materials'). This finding aligns with Haybi-Barak and Shoshana's (2020) critique of social marketing to encourage participation in vocational education. They concluded that an initiative could only be effective with an improved societal sentiment about the attractiveness of vocational education.

Noteworthy here is the disparity between school students' rating of 'Promoting role models who have successful careers after completing VET qualifications' and those from adult groups (i.e., teachers, parent, vocational educators). Whilst this way of presenting was rated second by schoolteachers and third by VET teachers and parents, it was not well rated by students (i.e., ranked 5th). There was a significant difference between the school student group and adult groups ($\chi^2 = 49.055$,

Table 17.8 Ranking of the approaches to presenting messages to encourage young people to engage in vocational education

	School		School				VET	
	student	S	teachers		Parents		teache	rs
Presentations of messages	Rank	%	Rank	%	Rank	%	Rank	%
Schools providing more personalised career information about VET jobs	1	37.3	3	46.8	2	50.5	1	48.8
Exposure to a range of work situations while still at school, to help with career decisions	2	39.5	1	59.9	1	54.0	2	42.6
Exposure to different institutes and education facilities (e.g., visits to VET institutes)	3	38.3	4	46.9	5	41.7	4	38.8
Online materials that are easy to access	4	30.2	5	46.5	4	44.2	5	37.1
Promoting role models who have successful careers after completing VET qualifications	5	23.5	2	52.1	3	49.6	3	42.1
Wide advertising (e.g., TV, radio, social media)	6	17.9	6	24.6	6	37.6	6	29.9
Simple, easy-to-understand printed materials (e.g., brochures, guidebooks)	7	6.2	7	11.2	7	14.3	7	12.0

p < .001). Only 23.5% of school students believed promoting role models to be extremely effective, in comparison to 52.1% of schoolteachers, 49.6% of parents, and 42.1% of VET teachers who expressed a similar belief. Additionally, school students valued the experience of 'Exposure to different institutes and education facilities', rating it third among effective ways to present informed and positive messages about vocational education. This finding emphasises the possible effectiveness of processes that can be mediated and experienced directly.

The disparity between school students' perceptions and those of the adult groups (i.e., schoolteachers, parents and VET teachers) may influence the decision-making about post-school pathways. The difference in preferences by young people and those whose advice shape their decision-making may potentially limit young people's understandings and, consequently, their decision-making about their preferred post-school options and occupations. For example, for the Secondary Education and Training (SET) survey that Hay and Sim (2012) refer to, which involves teachers and parents, there is a real risk that teachers who are inadequately informed and not student-focused, and biased advice from the adults in general might distort the responses from students. They may also engage in study options or occupations they are not suited to. Given current high attrition rates (i.e., over 50%) of young Australians in entry-level training (e.g., apprenticeships) (NCVER, 2020), there are significant concerns about the social and economic costs. Therefore, processes implemented to assist students' decision-making necessitate greater impartiality and focus on their preferences and capacities.

Perspectives and Suggestions of Students and Key Advisors

Overall, the findings from this analysis indicate that there are some important differences between how school-aged students and adults view key aspects of decisionmaking about post-school pathways. That is, the findings suggest that regardless of whether the adult is a schoolteacher, a parent or a vocational educator, their perceptions and perspectives may be removed from those of students. There are greater similarities across the adults (i.e., schoolteachers, parents, VET teachers). But this poses a difficulty if, as Gore et al. (2017) found, adults can sometimes have outdated perceptions of VET. Reliance on the experiences of familiars who regularly engage with young people may be insufficient for informed, student-focused and impartial advice. Since students can also be poorly informed, confused and unrealistic about requirements for entry into VET programs (Hargreaves & Osborne, 2017), a compounding factor can be observed with potentially poor consequences for young people and the workforce more broadly. Accordingly, the process of guidance about post-school pathways could comprise dialogic interactions with students to elaborate and advance to what occupations they are suited, as a social practice (Dewey, 1916) rather than relying mostly on the experiences and advice of adults. Above all

it is the quality of dialogue that is important. However, those who have most influence (parents and teachers) are often under informed, misinformed or societally biased in ways that disrupt effective deliberations and decision-making. It is also important to recognise that students' decisions regarding career pathways may change over time. In reality, given that individual career choices can be influenced by interactions, turning points and transformations throughout individuals' lifetimes (Tanova et al., 2008), an awareness of students' perceptions and understanding their perspectives about career decisions can make those turning points and transformations more positive for the individual, as well as for the stakeholders involved.

In sum, the key lesson here is that rather than relying upon the contributions that arise through engagement with potentially uninformed familiars (i.e., parents, teachers), a process approach may be necessary to provide unbiased and comprehensive advice about post-school pathways and occupations. It is important to also have mechanisms that allow their capacities, interests and aspirations to be engaged with this advice. These processes should be enacted to assist in more informed and impartial deliberations about preferred occupations and post-school pathways. As noted, there is a risk that uninformed decision-making about these pathways can have deleterious consequences for young people (i.e., circuitous territory pathways) and, thus, be more costly, let alone impacts on economies and society. In an era of high aspirations of parents and young people, school students' poorly informed decisions can lead to a misalignment between tertiary education provisions, participation and outcomes and other requirements for working lives. There are inherent tensions between the standing of VET, and personal and parental preferences and requirements for entry into VET. School staff (i.e., teachers, career counsellors) provide advice based on what is perceived to be effectual for the student. That is, if they meet the requirements for entry into university then school staff guide and advise students to follow such a pathway. There is also an underlying motive here to promote university pathways as a way of improving school ranking (Clarke, 2015). The geographical location of schools and socio-economic regions can also steer staff to direct students towards university or VET pathways (Foskett et al., 2008).

In all, the findings from the survey indicate that the important process of decision-making about post-school pathways, with its implications for young people, education systems as well as national social and economic goals, requires a more structured, informed and impartial mechanism for the various options to be considered and countenanced by young people, and supported unmediated by their parents and other familiars. Doubtless, however, ultimately societal sentiments will shape these deliberations. Impartiality is difficult to achieve when a strong societal sentiment privileges particular occupations and pathways in an era of high aspiration. Indeed, impartiality may not even be welcomed in such an era.

References

- Aarkrog, V. (2020). The standing and status of vocational education and training in Denmark. *Journal of Vocational Education & Training*, 72(2), 170–188.
- Baxter, J. (2017). Chapter 2: The career aspirations of young adolescent boys and girls. In Australian Institute of Family Studies (Ed.), The longitudinal study of Australian children annual statistical report 2016. AIFS.
- Billett, S. (2014). The standing of vocational education: Sources of its societal esteem and implications for its enactment. *Journal of Vocational Education and Training*, 66(1), 1–21.
- Billett, S. (2020). Perspectives on enhancing the standing of vocational education and the occupations it serves. *Journal of Vocational Education & Training*, 72(2), 161–169.
- Billett, S., Choy, S., & Hodge, S. (2020). Enhancing the standing of vocational education and the occupations it serves: Australia. *Journal of Vocational Education & Training*, 72(2), 270–296.
- Billett, S., Choy, S., Hodge, S., & Le, A. H. (2022a). Chapter 15: Investigating enhancing the standing of vocational education and the occupation it serves: Purposes, processes and phases. In S. Billett, B. E. Stalder, A. Vibe, S. Choy, S. Hodge, & A. H. Le (Eds.), The standing of vocational education and the occupations it serves: Current concerns and strategies for enhancing that standing. Springer.
- Billett, S., Dymock, D., Choy, S., Hodge, S., & Le, A. H. (2022b). Chapter 18: Practical strategies and distributed responsibilities: Enhancing the standing of vocational education and the occupation it serves. In S. Billett, B. E. Stalder, A. Vibe, S. Choy, S. Hodge, & A. H. Le (Eds.), *The standing of vocational education and the occupations it serves: Current concerns and strategies for enhancing that standing*. Springer.
- Billett, S., Dymock, D., Hodge, S., Choy, S., & Le, A. H. (2022c). Chapter 6: Shaping young people's decision-making about post-school pathways: Institutional and personal factors. In S. Billett, B. E. Stalder, A. Vibe, S. Choy, S. Hodge, & A. H. Le (Eds.), The standing of vocational education and the occupations it serves: Current concerns and strategies for enhancing that standing. Springer.
- Bisson, R., & Stubley, W. (2017). After the ATAR: Understanding how Gen Z transition into further education and employment. Year13. Retrieved from https://youthsense.com.au/research
- Bowen, G., & Kidd, E. (2017). Career guidance: The missing link in school to work transitions. Youth Action.
- Brown, J. (2017). In their words: Student choice in training markets Victorian examples. NCVER. Cedefop. (2017). European public opinion survey on vocational education and training (Cedefop Research Paper No. 62). Publications Office of the European Union. https://doi.org/10.2801/264585
- Chesters, J. (2015). Pathways through secondary school in a comprehensive system: Does parental education and school attended affect students' choice? *International Journal of Training Research*, 13(3), 231–245.
- Choy, S., Dymock, D., Hai Le, A., & Billett, S. (2021). Understanding student decision-making about VET as a pathway: An Australian study. *International Journal of Training Research*, 1–17.
- Clarke, K. (2015). Careers education must be for all, not just those going to university [online]. *The Conversation*. Retrieved from https://theconversation.com/careers-education-must-be-for-all-not-just-those-going-to-university-49217
- Clement, U. (2014). Improving the image of technical and vocational education and training. Federal Ministry for Economic Co-operation and Development. Retrieved from https://www.dcdualvet.org/wp-content/uploads/2014_GIZ_Improving-the-Image-of-Technical-and-Vocational-Education-and-Training_A-synthesis.pdf
- Dewey, J. (1916). Democracy and education. The Free Press.
- Foskett, N., Dyke, M., & Maringe, F. (2008). The influence of the school in the decision to participate in learning post-16. *British Educational Research Journal*, 34(1), 37–61.

- Fuller, C., & MacFadyen, T. (2012). 'What with your grades?' Students' motivation for and experiences of vocational courses in further education. *Journal of Vocational Education & Training*, 64(1), 87–101.
- Fuller, C., McCrum, E., & Macfadyen, T. (2014). Teachers' knowledge and experiences of information advice and guidance: Some implications for the current policy context in England. *Education Inquiry*, 5(22).
- Galliott, N., Graham, L. J., & Sweller, N. (2015). Who struggles most in making a career choice and why? Findings from a cross-sectional survey of Australian high-school students. *Journal* of Psychologists and Counsellors in Schools, 25(2), 133–151.
- Gemici, S., Bednarz, A., Karmel, T., & Lim, P. (2014). The factors affecting the educational and occupational aspirations of young Australians. NCVER.
- Ginevra, M. C., Nota, L., & Ferrari, L. (2015). Parental support in adolescents' career development: Parents' and children's perceptions. The Career Development Quarterly, 63(1), 2–15.
- Gore, J., Ellis, H., Fray, L., Smith, M., Lloyd, A., Berrigan, C., Lyell, A., Weaver, N., & Holmes, K. (2017). *Choosing VET: Investigating the VET aspirations of school students*. NCVER.
- Hargreaves, J., & Osborne, K. (2017). Choosing VET: Aspirations, intention and choice. NCVER.
 Hay, S., & Sim, C. (2012). Excluded from the game: A case study of transitions for non-tertiary-bound students in a Queensland private school. In S. Billett, G. Johnson, S. Thomas, C. Sim, S. Hay, & J. Ryan (Eds.), Experiences of school transitions: Policies, practices and participants (pp. 179–199). Springer.
- Haybi-Barak, M., & Shoshana, A. (2020). Separatist biopolitics: The dual discourse of the vocational education policy in Israel. *Journal of Vocational Education and Training*, 72(2), 297–314.
- Haywood, H., & Scullion, R. (2018). 'It's quite difficult letting them go, isn't it?' UK parents' experiences of their child's higher education choice process. *Studies in Higher Education*, 43(12), 2161–2175.
- Hodge, S., Billett, S. & Choy, S. (2022). Chapter 16: Perspectives of school students, parents, teachers (Phase 1). In S. Billett, B.E. Stalder, A. Vibe, S. Choy, S. Hoge, & A.H. Le (Eds). The standing of vocational education and the occupations it serves: Current concerns and strategies for enhancing that standing. Springer.
- Homel, J., & Ryan, C. (2014). Educational outcomes: The impact of aspirations and the role of student background characteristics. NCVER.
- Krause, K.-L., Vick, M., Boon, H., Bland, D. C., & Clark, J.-A. (2009). A fair go beyond the school gate? Systemic factors affecting participation and attainment in tertiary education by Queensland students from LSES backgrounds. Queensland Department of Education and Training.
- Lamb, S., Maire, Q., Walstab, A., Newman, G., Doecke, E., & Davies, M. (2018). Improving participation and success in VET for disadvantaged learners. Research report. National Centre for Vocational Education Research (NCVER).
- Matthews, D. (2014). More information results in better choices, right? Not so, Hefce learns, *Times Higher Education*, April, p. 9.
- Maxwell, G., Cooper, M., & Biggs, N. (2000). How people choose vocational education and training programs: Social, educational and personal influences on aspiration. NCVER.
- National Centre for Vocational Education Research (NCVER). (2020). Australian vocational education and training statistics: Completion and attrition rates for apprentices and trainees 2019. NCVER.
- Noonan, P., & Pilcher, S. (2018). *Participation in tertiary education in Australia: Modelling and scenario analysis*. Mitchell Institute, Victoria University.
- Ofsted. (2010). Moving through the system: Information, advice and guidance. Reference no: 080273. http://hdl.voced.edu.au/10707/50320
- Stalder, B. E., & Lüthi, F. (2020). Job resources and career success of IVET graduates in Switzerland: A different approach to exploring the standing of VET. *Journal of Vocational Education and Training*, 72(2), 189–208.

- Tanova, C., Karatas-Özkan, M., & Inal, G. (2008). The process of choosing a management career: Evaluation of gender and contextual dynamics in a comparative study of six countries: Hungary, Israel, North Cyprus, Turkey, UK and the USA. Career Development International, 13(4), 291–305.
- UNESCO-UNEVOC. (2018). Short summary of the virtual conference on improving the image of TVET: Making TVET attractive to youth. Retrieved from https://vocationsandlearning.files. wordpress.com/2019/10/vc_synthesis_21_final.pdf
- Webb, S., Black, R., Morton, R., Plowright, S., & Roy, R. (2015). Geographical and place dimensions of post-school participation in education and work. NCVER.
- Workman, J. L. (2015). Parental influence on exploratory students' college choice, major, and career decision making. *College Student Journal*, 49(1), 23–30.

Chapter 18 Informing and Advising the Zones of Influence Shaping Young People's Decision-Making About Post-School Pathways (Phase 3)



Stephen Billett, Darryl Dymock, Sarojni Choy, Steven Hodge, and Anh Hai Le

Abstract Changing personal and societal sentiments about the status of vocational education and the occupations it serves requires information, education, action at societal and local levels and will, inevitably take time. With entrenched issues such as the standing of occupations and the education systems that they serve, it is more likely incremental and focused initiatives are required to bring about this change. It has been consistently identified that there are 'zones of influence' shaping young people's decision-making about postschool pathways. These zones comprise the aspirations and advice of parents, the intended and unintended press of schoolteachers, the views of peers and suggestions arising from within the community. Consequently, advising and shaping young people's decisions about postschool pathways, including an informed and impartial consideration of vocational education, are not restricted to those students alone. Instead, it is necessary that those comprising these zones of influence also need advice and information so that young people's decision-making can be supported by informed and impartial advice. A series of workshops with teachers and administrators, and presentations to policy and practitioner groups were used to evaluate the findings from focus groups and interviews, and a national survey that are elements of an Australian study. Those events were directed to identify how key institutions of government, schooling, vocational education institutions and industry could work to shape these zones of influence in ways that promoted broader and more informed considerations about postschool pathways, including vocational education. This led to strategies that could be used to reshape and enhance the standing of vocational education as a worthwhile post-school pathway across these zones of influence. These strategies were proposed as being directed broadly to inform that decision-making, and that

S. Billett $(\boxtimes) \cdot D$. Dymock \cdot S. Choy \cdot S. Hodge \cdot A. H. Le School of Education and Professional Studies, Griffith University, Brisbane, QLD, Australia e-mail: s.billett@griffith.edu.au

[©] The Author(s), under exclusive license to Springer Nature Switzerland AG 2022 S. Billett et al. (eds.), *The Standing of Vocational Education and the*

includes perspectives, aspirations and interests of school students, parents, teachers, other familiars and members of the community, who in different ways shaped those perspectives. This chapter sets out some initiatives that might be enacted by government, schools, employers, and teachers to offer experiences and informed and impartial advice about potential postschool pathways through engaging with the zones of influence.

Keywords Zones of influence \cdot Parents \cdot Teachers \cdot Decision-making \cdot Support \cdot Guidance \cdot Impartiality \cdot Strategies \cdot Local factors \cdot Distal influences \cdot Proximal influences \cdot Education policies \cdot Education practices

Enhancing Postschool Decision-Making Through Informing Zones of Influence

A common concern across many countries, both those reported here and elsewhere, is that vocational education and training (VET) and the occupations it serves are being viewed as relatively and increasingly unattractive to young people, their parents and other familiars (Billett & Le, 2022a, b; Cedefop, 2017; Hodge et al., 2022; Le, 2022; Pantea, 2022; Veillard, 2022). Some exceptions are Germany, Austria and Switzerland where vocational education provisions are held in relatively higher esteem and with corresponding levels of participation (e.g., Stalder & Lüthi, 2020). Yet, even in those countries, there are emerging challenges to this standing arising from heightened aspirations and differential occupational status (Deissinger, 2022). Globally, vocational education is often viewed as an option for those without the ability to participate in higher education (Cedefop, 2017). As such it is misaligned with the growing aspirations of young people and their parents in countries with both developing (UNESCO, 2018) and developed modern economies (Clement, 2014).

There is nothing particularly new about the relatively low standing of vocational education, though increasingly wide adoption and intensity across countries, regardless of their level of development. These kinds of views echo back to at least Hellenic Greece and have been serially perpetuated across human history by the societal elites comprising autocrats, theocrats, bureaucrats and academics (Billett, 2014). Yet, this sentiment has been generated and perpetuated in ways that are uninformed by evidence or insights about the practice of the occupations or those who practice them. Instead, these others knew and know better, it seems. These views and accompanying actions have shaped societal perceptions about what constitutes worthwhile forms of employment and the preparation for them. Work that is seen to be based upon manual skills, exposes workers to excessive heat, smells, dirt or the exercise of physical activities, whilst being virtuous at one level, are not seen as being desirable by those who are in or wish to aspire to socially desirable positions. Of course,

such sentiments are not consistent or evenly applied. The work of the most highly paid workers – surgeons – is, of course, of this kind.

These societal sentiments have implications for the attractiveness of and participation in vocational education (Billett, 2014). They extend to how it is positioned as an educational sector and the kinds of support it receives from government and community, and the decisions young people make about post-school pathways. Haybi-Barak and Shoshana (2020) illustrate how government decisions about VET play out through distinguishing between technical and technology education. What their article also emphasises is that although social marketing can be used to encourage participation in VET, unless it is held in high regard within government and the community, it will continue to be positioned as of low status and a less-preferred option, and only for those young people with no other options (UNESCO, 2018). The projection of these kinds of societal sentiments is reflected in how VET is seen in the community, and, accordingly, how young people come to engage with it. As is consistently reported, it is familiars (i.e., parents, teachers, peers and what is expressed in the community) who mediate that societal sentiment and in ways that shapes this decision-making (Cedefop, 2017; Clement, 2014; UNESCO, 2018). These ways comprise localised processes shaping decision-making about participation in VET. These processes can be understood as zones of influence that both perpetuate and personalise sentiments about the standing of vocational education and the occupations it serves (SVEOS) and as a post-school option are shaped within them. So, as is evident across the reporting of a range of initiatives to enhance SVEOS (Aarkrog, 2020; Haybi-Barak & Shoshana, 2020; Hiim, 2020; Stalder & Lüthi, 2020) enhancing the status will remain unproductive unless a more informed and impartial discourse shapes decision-making, as found in Australia (Choy et al., 2022; Hodge et al., 2022; Le, 2022).

The shaping and enactment of that societal discourse about vocational education is important not only for its efficacy (i.e., levels of participation and outcomes), but also for the sense of self of those working in the sector and who are students in and graduates from it. Stalder and Lüthi (2020) note the exercise of personal resources that is central to securing effective job outcomes and include individuals' appraisal of their worthiness, effectiveness and capabilities. However, in an era of high aspiration of young people and their parents, persistent and growing societal sentiments about the low standing of vocational education and the occupation it serves works against the useful contributions of VET provisions. So, measures such as those that support positive learning outcomes for young people, including pathways to higher education have become salient, which Aakrog (2020) suggests are often not sufficient. All of this suggests that there are localised zones of influence that shape young people's decision-making need to be centre stage and the focus of initiatives seeking to change the SVEOS. Also, though changing those sentiments at the local level contributes to more informed, an impartial and constructive account of the worthiness of vocational education and the occupations it serves can be generated at another level of zone of influence: national sentiment.

The concern of this chapter is that approaches to redress or change deeply entrenched societal views about VET need to be exercised locally and proximally, and then collectively bring about that change. It is proposed that the zone of influence comprising various actors including parents, teachers, guidance officers and peers and friends should be the central focus of such initiatives rather than centring upon young people alone. The importance of changing this sentiment is not restricted to individual goals, trajectories and aspirations, it is about also generating the kinds of capacities within the community that can provide services and goods that they need and want. This includes developing capacities to progress modern and emerging forms of work that are high status and important for the economy and, the latter associated with skills that are manual, menial and associated with earlier forms of work. Collectively, through informing these localised zones of influence, changes might be brought about at national and global levels.

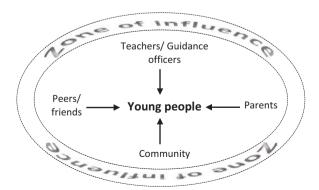
Zones of Influence

As noted, the familiars with whom young people engage, are consistently reported as shaping their decisions about postschool pathways, most of which occurs intentionally or unintentionally through close encounters with them. The key sources of this influence are parents or caregivers, high school teachers, peers and members of the community with whom they interact (e.g., peers, friends, extended family), and also media, albeit experienced and mediated by familiars. That shaping can be quite intentional. For instance, parental aspirations and preference can be deliberate and powerful in shaping those decisions (Hodge et al., 2022). Yet, that influence can be projected implicitly through subtle means such as constant suggestions by teachers, about the importance of schooling success leading to best work life outcomes. Of course, teachers, like parents, also want the best outcomes for their students, so will promote those options that are societally sanctioned and supported. Adults want their students and off springs to aspire to achieve their best. Then, there are the preferences and views of peers who are in the process of forming their choices about postschool pathways and occupations. So, there is a high level of consensus that this group of familiars influence shaping of the decision-making by young people about their post-school pathways in ways that variously support, challenge or contradict their emerging preferences for occupations or areas of employment (Choy et al., 2022; Clement, 2014). These familiars might also suggest which options are best aligned to the young person's capacities and interests and include pragmatic issues such as ability to access engagement and or employment of the kind that these young people desire. This is not to suggest that these suggestions are unquestioningly accepted. Often quite the opposite can be the case: they can be rebuffed and contested by the young person (Hodge et al., 2022). As Valsiner (1998) reminds us, the social suggestion is far from being uniformly construed or accepted, but necessarily has to be rebuffed, such as its ubiquity. So even in circumstances where 'social saturation' (Gergen, 2000) can occur (e.g., powerful and persistent suggestions of parents), there is always space for resistance, rejection and forming a contrary view and diverse actions. Indeed, what was noteworthy from a national survey in Australia (Choy et al., 2022) were divergences between the perspectives of adult informants (i.e., parents, schoolteachers, vocational educators) on young people's preferences for post-school pathways and who was most influential in informing decisions about those pathways.

So, that decision-making is founded on these young people's previous experience -and how they have come to approach the task of deciding about post-school pathways. For some, there is great certainty and decisiveness about their choice, whilst many others remain undecided, and want a moratorium on making that decision, until they know more about the options and, perhaps, about themselves (Hodge et al., 2022). One way to describe the enactment and negotiation of these suggestions is to view them as a local or proximal 'zone of influence' (see Fig. 18.1). The concept of zones is used within learning and development theories to explain the factors shaping the active process of meaning making acknowledging the contributions of the social world and the individual as a meaning maker. For instance, the Zone of Proximal Development (Cole, 1985) or, as seemingly preferred by Vygotsky, the zone of potential development (Valsiner & van der Veer, 2000) offers a way of illuminating and explaining these processes of thinking and acting and learning. At a meta-level, the societal sentiment comprises a zone of influence that, as noted above and earlier (Billett, 2014), shapes societal views of what is worthwhile, and worthy of our best efforts and aspirations. How that shaping of decision-making is manifested can be presented as a zone of influence that is enacted largely with young people by their parents, teachers and other familiars.

Figure 18.1 depicts how actors within these local zones of influence come to shape young people's thinking and acting, in the form of decision-making. It indicates the suggestions that are projected by parents (e.g., aspirations, inferences, openness, various focuses including pragmatic outcomes, finding satisfying or fulfilling their interests), teachers (e.g., the projection of what is seen as being societally worthwhile occupations, what is valued in schools, what reflects their experience), friends (e.g., what constitutes present and localised desirable occupations) and familiars/community that project options, preferences and what is deemed to be societally worthwhile or aligned with the young person's interests (Choy et al., 2022; Hodge et al., 2022).

Fig. 18.1 Zone of influence



Yet, whilst studies consistently report how common and powerful these influences are, they also acknowledge that they are often partially or wholly uninformed, or emphasise what influential others would prefer, rather than the young persons themselves. For instance, as indicated in Choy et al. (2022), teachers may lack understanding and underestimate significantly their shaping of students' decisionmaking, through the comments they make in day-to-day classroom discussions. Yet, from interviews with these teachers and other accounts (Fuller et al., 2014), it is evident that their views are based mainly upon their own personal experience, which rarely extends to engagement in vocational education, those occupations served by it or even those who participate in it. Much the same seems to be the case for parents (Hodge et al., 2022). So, efforts to bring about change within young people's decision-making necessarily needs to include those within local zones that shape their decision making. These constitute their parents or caregivers, teachers at school, peers and friends and, as was projected, the community in which they live. That is, efforts to bring about this change should not just focus on young people alone, but more broadly within the community and specifically directed at parents and teachers who comprise zones of influence that shape and project advice about post-school pathways.

Building upon what has been suggested above about the salience of the localised zones of influence shaping young people's decision-making about postschool pathways, that beyond focusing on young people themselves there is also a need to inform the participants in these zones. These include parents, teachers, peers and other familiars. That is, these efforts should not be directed towards just young people themselves, but those who shape them.

Arising from the findings from the first two phases of the Australian study (Choy et al., 2022; Hodge et al., 2022), four key sources of advice, guidance and support for young people's decision-making about postschool pathways were identified as sets of factors shaping these zones of influence. These factors comprise the suggestions of government, schools and schooling system, vocational education and training institutions and those who employ (i.e., industry) as shown in Fig. 18.2.

However, an elaboration of the sources and implications of these zones of influence need to be progressed to identify practical strategies that can ameliorate for or respond to the task of providing informed and impartial advice.

Policy Goals and Initiatives: Shaping the Zones of Influence

Although the relative low standing of VET is a global concern, its manifestations, impacts and potential remedies are likely to be quite country specific. However, given the salience of this localised shaping, it is likely that these need to be focused on local circumstances. Therefore, policy goals and initiatives associated with informing about post-school pathways in a more impartial way is best shaped and implemented nationally but enacted locally (Billett, 2020; Billett & Le, 2022a, b). Certainly, there have been interventions developed and enacted across a range of

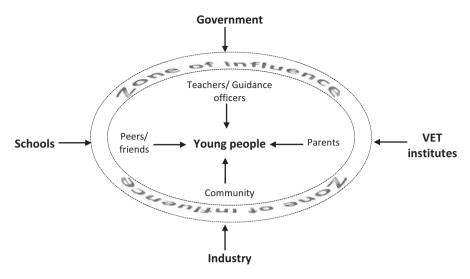


Fig. 18.2 Shaping the local zones of influence

countries to offer national solutions to enhance the standing of vocational education. For instance, in Norway (Hiim, 2020) and Denmark (Aarkrog, 2020), there are clear national goals to improve retention in VET programmes. Hence, policy efforts to improve the SVEOS are directed towards improving its quality. At a national level this might include initiatives such as elevating teacher education requirements, curriculum reforms and to more closely align what is taught and experienced in VET with the requirements of work (Hiim, 2020). All of these are within the ambit of national governments who fund, organise and manage vocational education systems.

Yet, as Aarkrog (2022) notes, unless such initiatives address the concerns of individuals impacted, they may be less than successful. In Finland, there are national concerns about declining numbers of school-leavers progressing into VET, with an increasingly large component of its student cohort being adults and whose initial VET is occurring in early adulthood (Rintala & Nokelainen, 2020). Hence, the key focus of policy goals in that country are often associated with the quality of learning experiences and how they can assist students and graduates develop the capacities required to be effective in workplaces (Rintala & Nokelainen, 2020). Yet, in Denmark, the national policy focus is on elevating the SVEOS by increasing the entry requirements, thereby making the institutions and programs more prestigious and attractive to young people (Aarkrog, 2020). However, the consequence is a less inclusive provision of education that excludes socially marginalised students. In Spain, initial reforms of VET were directed towards addressing issues of low literacy of VET students (Martínez-Morales & Marhuenda-Fluixá, 2020), hence the need to integrate VET provisions with schooling in which the general education curriculum is being enacted. Latterly, curriculum initiatives were enacted in Spain focus less on 'academic' considerations and more on those associated with the requirements of work. But, beyond these technical focuses are aspects associated with how members of the zones of influence shape that decision-making.

To redress views that VET is 'dead-end', in some countries, arrangements are being implemented to ensure that there is articulation to higher education (Billett, 2020). Unlike other countries, participation is not the top policy concern in Switzerland, rather the quality of overall outcomes for completers (Stalder & Lüthi, 2020). The central policy focus here is the progression to higher education and to augment vocational qualifications with degrees, thereby realising work-related outcomes for VET students comparable with those who participated directly in higher education (Stalder & Lüthi, 2020). Moreover, it was found that not only levels of salary, but also measures of work quality (i.e., discretion and collegiate interactions) or equivalent also arise from progression on pathways to higher education. Reinforced here is that the standing of initial qualifications at the commencement of working life is a key facilitator for productive career progressions and quality of employment (Stalder & Lüthi, 2020). These examples indicate something of the diverse policy goals being sought across nation states and policy initiatives being enacted to secure them. In education, curriculum initiatives and reforms of practices are often the central mechanism for achieving policy goals, and enhancing the SVEOS is no exception. Yet, these will differ across nation states in response to challenges in different countries. Reflected here are those ways raised in the qualitative and quantitative accounts in which the standing of vocational education as a postschool option could be enhanced in Australia (see Choy et al., 2022; Hodge et al., 2022). However, the realisation of these goals and enactment of these initiatives are ultimately going to be premised upon specific and broadly cast initiatives that commence with curriculum practices.

Curriculum Initiatives and Practices

Curriculum initiatives associated with enhancing the status of VET have been found to differ across countries depending upon the kind of goals to be achieved. For instance, in Norway, curriculum initiatives aiming to make the course content more theoretically-premised were intended to make it more educationally attractive for young people (Hiim, 2020). Moreover, the structuring of an initial broadly focused set of experiences to address broad industry sectors rather than specific occupations was an attempt to make VET less narrow and more widely foundational. In Denmark, the initiatives include providing youth-orientated learning environments, transition from VET to higher education, improving the quality of training and provision of workplace experiences (Aarkrog, 2020). In Australia, information strategies are being deployed by both federal and state governments to inform students about occupations and VET in ways intended to promote informed and impartial decisionmaking about postschool pathways (Billett et al., 2020). As noted, in Spain a series of reforms aimed to dignify and provide greater educational rigour to VET, which was changed to make the content and experiences more relevant to the world of

work and, specifically, the occupations served by its courses (Martínez-Morales & Marhuenda-Fluixá, 2020). Hence, initial reforms were aimed to provide more general education, that later were overturned by considerations about modernising VET provision to make it more occupationally relevant with the guidance of industry stakeholders.

Issues associated with improving pedagogic practices to make the learning experiences better and to address specific educational concern such as the development of conceptual knowledge also featured in Finland, Denmark, Norway and Spain. For instance, in attempts to dignify VET in Norway (Hiim, 2020), an emphasis on improving teacher quality through a more extended period of preparation has been introduced. Here, there is a specific attempt to address the parity question by providing students with educational experiences designed and enacted by university qualified teachers. The provision of workplace experiences in the curriculum is often adopted to enhance the relevance and the provision of authentic work experiences, for instance in Denmark (Aarkrog, 2020). Yet, as with other curriculum initiatives, without finding ways of engaging with young people and their parents, these curriculum changes may be insufficient. What can be seen here is that governmental actions often focus on enhancing the provision of VET, seeking to align its purposes and processes with specific occupations and the world of work. Yet, unless what is being proposed is going to convince and engage more young people to participate, these efforts may not be very effective (Billett, 2020). Yet, a number of things have just been raised requires initiatives addressing not just young people but those comprising those influencing them. A starting place for changing those sentiments is undoubtedly what occurs in schools and through schooling.

Practices in Schools

High schools and those who teach in them play a key role in shaping students' decision-making in both, everyday and specific career development practices (Choy et al., 2022; Hodge et al., 2022), though the focus and ways information and support are provided can differ. Schools providing information, realistic and appropriate guidance in decision making, and support to consider and pursue the widest range of options is especially important for low socio-economic status students, whose parents may have limited knowledge and levels of engagement (Krause et al., 2009). For instance, most Australian students participated in at least one career advice activity during their senior schooling (Rothman & Hillman, 2008). These activities included the distribution of printed textual material (the most common), attendance at talks by tertiary institutions, and individual or group discussions with career advisers. The greater the number and kind of activities students participated in, the more likely they were to report finding them useful. However, Rothman and Hillman (2008) also found that young people who work part-time whilst at school may have a stronger sense of their career interests and perceive the worth of school-based career advice differently from those who are not working. In another study, participation in school-based career activities and searching for career information varied between those who aspired to attend university and those who did not (Gore et al., 2015).

In Denmark, a 5-day program was introduced into lower-secondary schooling to assist young people make decisions about postschool pathways (Aarkrog, 2020). However, this initiative was not wholly effective, possibly because the career guidance counsellors were not adequately equipped for the role. For students who had already decided their occupation, this program did little to change their choice, and for those who were undecided, it seemed not very impactful. When appraising the series of reforms to promote the SVEOS in Denmark, Aarkrog (2020) concluded that these initiatives were not sufficient. That is, intentional initiatives that do not engage or, from their perspective, help young people may be fruitless. This consideration extends to whether young people see the occupations that VET prepares them for as worthy of engagement.

There are also reported differences in judgements between Australian students and educational providers about the worth of career development services in schools (Rainey et al., 2008). Providers claimed they delivered a wide range of services (i.e., career education, information, guidance, advice, placement and referral), but students reported that these services mainly focused on print-based information only. Most young people in this study reported holding a positive view of VET, but that improvements in the distribution of information about VET were needed. Computerbased sources and experience-based interventions, such as placement and referral were two services that were frequently requested. Noteworthy, in research undertaken 10 years later, Galliott (2017) queried the increasing use and dependence upon online career information and guidance systems. She noted the use of online resources presupposes that young people possess the agency and capability for problem identification, information searches, the evaluation of alternative solutions, and making rational choices about post-school pathways. She suggested that such resources were more likely to be effective when combined with face-to-face advice, a proposal that has been echoed elsewhere (Galliott, 2017). This then emphasises the importance of familiars being well informed to provide advice and shaping that decision-making. This same view was expressed by the school age students who were interviewed for the Australian project. Some explicitly stated that they wanted direct (i.e., face to face) assistance when engaging with these on-line resources (Billett et al., 2020). Hence, the importance of localised guidance, which is most likely to be provided by familiars.

Informed Knowledge About VET and Its Occupations

While many studies provide evidence that the practices of family, particularly parents and carers, the statements and practices of students' teachers and friends (i.e., familiars) are important in shaping decision-making, they may not lead to well-informed and personally-appropriate decisions as these practices are not necessarily

informed (Billett et al., 2020). Evidence to a Victorian parliamentary inquiry (2018) raised the possibility that a mismatch between parents' understandings of career options (i.e., shaped by their own education and employment experiences) and the realities of the labour market could lead to poor decisions. Students from a rural background reported a career development program by a university provided information that their family, friends, and local networks could not otherwise provide (McIlveen et al., 2012). Similar concerns in relation to the quality of information available were raised in socio-economically disadvantaged communities (Lamb et al., 2018; Webb et al., 2015). Phillips (2012) suggested, from US experience, a need to re-educate parents about the value of occupations that are not high on the social status scale and about the high level of cognitive and manual skills needed in many contemporary VET-related occupations, a sentiment shared by Rose (2004), Crawford (2000) and Sennett (2008). Indeed, the reliance on parents advising their children about post-school pathways revealed in a survey administered by Bisson and Stubley (2017) raises questions about how well-equipped parents are to offer such advice, especially given the findings of a study (Bedson & Perkins, 2006) that only 11% of some 300 parents surveyed felt prepared enough for such a role and 77% admitted they had insufficient knowledge. Hence, whilst salient in terms of shaping young people's decision-making, these familiars well-informed.

As foreshadowed in the example from Denmark, there is a growing emphasis on informing school students about post-school pathways in the schooling systems. Yet, it is important to understand the processes and outcomes of these processes in making judgements about the efficacy of the information offered to school students. Sometimes, the emphasis is on selecting courses for the senior years of schooling and, in other instances it is a process that deliberately seeks to assist in forming and making decisions with implications beyond the senior schooling years. Nevertheless, it seems that school students themselves are not always well-informed when selecting subjects and the pathways available to them at secondary school (Dalley-Trim et al., 2008). These researchers found that the three main reasons given for choosing to do VET subjects were that they were: (i) 'fun', 'enjoyable' subjects; (ii) that the qualifications and vocational experience obtained provided a link to post-school pathways and employment, providing a 'head start' for some and a 'back up' for others, and (iii) that they offered a 'change of pace' from more intellectually demanding school subjects. The first and third views are potentially problematic, contributing to negative perceptions of VET (i.e., that it is only an option for less academically-inclined students). Gore et al. (2017) also found that many Australian students lacked clear, accurate and contemporary information about the VET sector. They suggested that schools and/or VET providers recruit a more diverse range of students and ensure that students and their parents/carers have a greater awareness of available vocational pathways and destinations. Students' conceptions of those pathways and their destinations are a central factor. Again, it seems these conceptions are often shaped through close interactions with familiars.

Creed et al. (2010) compared the career development of work-bound and VETbound students, relative to university-bound students. They found significant differences between the work-bound and university-bound students in terms of career exploration, knowledge of the world of work, knowledge and use of decisionmaking principles, and level of certainty about a career. Significant differences were also found between these two cohorts' knowledge of the world of work. There were also significant differences between the two cohorts with regard to knowledge of options and decision-making about them. Work-bound students were reported as being the poorest prepared, which may have resulted from career education in their schools focusing on higher education pathways at the expense of those focusing on work and VET. Thus, work-bound students may be making occupational decisions based on insufficient career information, a poor understanding of how labour markets operate, and employing poor decision-making skills. The findings suggest a need for relevant career information and training available to those students contemplating leaving school early so that they can become better informed and more skilled in planning their occupational futures. For instance, Hawkins (2017) described rural girls' barriers to higher education options in terms of the lack of "cultural capacity, navigational capacity and 'hot knowledge' to fulfil these aspirations" (p. 50). That is, they suffered from the geographical constraints raised earlier: lack of engagement with those who were well informed about various post-school options and pathways, were isolated in terms of their ability to sift through and engage with advice and information in informed ways and were unaware of specific knowledge about how to maximise school scores and profiles to their advantage.

Gaylor and Nicol (2016) evaluated an experiential career exploration program by examining Grades 11 and 12 (i.e., senior high school) students' motivation and career decision-making self-efficacy. They found that most program participants were already intrinsically-motivated about career exploration, but that many of them had concerns about making difficult decisions and seemingly possessed fixed expectations about their future careers. While Gaylor and Nicol (2016) also found a positive relationship between program completion and career decision-making self-efficacy, they proposed improvements to customise information by surveying students to identify knowledge gaps and areas of most interest to them. A few things that have just been raised rehearse concerns noted earlier about students wanting guidance to work through the materials about occupations and pathways with which they are provided.

As with some parents, Australian students also reported tending to form an early, but largely uninformed view, that university is preferable to VET as a post-school destination (Gore et al., 2017) – a conclusion confirmed by Hargreaves and Osborne (2017). These findings suggest that providing positive views of VET is warranted earlier in students' schooling than in mid/senior high school. This seems important given they were also sometimes confused and even unrealistic about the educational requirements for VET-related occupations (Hargreaves & Osborne, 2017; Gore et al., 2017). Hargreaves and Osborne (2017) found that students were motivated by both structured and ad hoc opportunities to experience VET-related occupations, and that gender stereotypes continued to be a strong impact on career choice.

In these ways, school students' socio-economic status, their educational achievement and experiences, and knowledge that they have about post-school options, be

it provided through intentional or unintentional suggestions at school or from parents, all influenced their decision-making about post-school pathways. As such, these complex factors stand as key suggestions that shape their decisions about pathways and the degree by which their decision-making is well and impartially informed. Yet, it seems that changing these views and reshaping them are likely to occur at the local level through engaging with familiars, that here are referred to as being in proximal zones of influence.

Informing the Zones of Influence: An Australian Investigation

As noted in Billett et al. (2022), the third phase of the Australian study comprised dialogue forums organised with school administrators, teachers, parents and other organisations (e.g., vocational institutions and employers) to validate, nuance, refine and extend the findings from the first two phases (Hodge et al., 2022; Choy et al., 2022). These interventions comprised a series of five dialogue forums held in metropolitan, regional and remote communities that focused on the viability and implementation of a series of initiatives. The participants consisted of school and VET students, teachers, and departmental officers. These forums progressed through an initial presentation of the key findings with participants, then engaging in small groups in which they addressed specific tasks related to the findings that were presented to them on information sheets, in both hard copy and electronic form.

The specific initiatives discussed in these forums were the most highly ranked responses during the surveys in Phase 2 (Choy et al., 2022). That is, a priority listing of initiatives was established and those that were most frequently mentioned were considered at the forums. Consequently, each of these forums had groups of participants who focussed on one or two of the initiatives to ensure that a larger number of initiatives were given consideration. The activities were grounded in the use of specific (anonymised) cases that were identified in Phase 1 (*see* Hodge et al., 2022) as bases for responding to specific tasks. For instance, "Taking the case of Jim, what strategies at a local, state and national level need to be enacted to make him see VET as a more viable and worthwhile option?" Then discussion was undertaken about how these various initiatives could be enacted.

Informants in the dialogue forums suggested a range of practical strategies that might be enacted by: (i) VET institutions, (ii) schools, and (iii) governments and industry. These strategies are proposed as actions that can be taken to promote the standing, attractiveness and viability of VET as a post-school pathway.

Consultations with School Administrative Groups

The main points that emerged from dialogues with teachers and administrators, and presentations to policy and practitioner groups about the findings from Phases 1 (Hodge et al., 2022) and 2 (Choy et al., 2022) are captured in Table 18.1 below. In the left-hand column are propositions advanced through the forums, and in the right column focuses of those familiars who shape young people's decision-making about postschool pathways.

As can be seen from Table 18.1, few of the propositions are directly related to students, more are focused on issues for teachers, parents and school guidance officers, as well as the way that schools need to engage with the community and local enterprises.

Much of what was advanced through these meetings echoed perspectives and advice that is found in other studies (e.g., Billett & Le, 2022a, b; Le, 2022; UNESCO-UNEVOC, 2018) as well as Phases 1 (Hodge et al., 2022) and 2 (Choy et al., 2022) of the Australian investigation. Beyond these observations, the workshop participants also identified and suggested strategies to promote the SVEOS to the individuals that comprise and shape the zones of influence.

Table 18.1 Propositions and perspectives

Propositions	Familiars
parents often not knowledgeable about VET (narrow and outdated;	Parents
Adults acknowledge there are high quality, respected VET jobs, but still promote university qualifications;	Parents, teachers, adult familiars
School guidance officers – Misunderstandings about their roles/capacities/expectations – More about student welfare and guidance officers perceived to have limited understanding of occupations served by VET;	Teachers, parents
School students and teachers advising need better/easier engagement/ interaction with staff at VET institutions; students generally perceive such institutions as limited in course flexibility and in their social environment	Students, teachers, parents, and peers
students rarely use printed materials for information – They want personalised materials – But schools report they normally do not have the staff to provide that level of support;	Teachers, parents
Many students not bound for university view senior years as unhelpful, and are disengaged;	Schools
Schools - engagement with parents and local employers often difficult to foster and make productive;	School, community
teachers and career advisers often poorly informed about VET options post-school, partly through lack of time to access such information and no personal experience of VET; and	Teachers, career guidance officers
The extent to which VET is presented as an equal option with university study tends to depend on the attitudes of schools' senior administrators.	Schools

Strategies to Promote the Standing of Vocational Education and the Occupations It Serves

Informants in the forums suggested a range of practical strategies that might be enacted by: (i) VET institutions, (ii) schools, and (iii) government and industry. These strategies are aimed to promote the image, attractiveness and viability of VET as a worthwhile post-school pathway. As such, they represent bases by which the zones of influence can be informed, shaped and addressed. They are presented in the sections below

VET Institutions

In overview, there are four themes that emerge from the research about what VET institutions might do to promote VET, including: (i) marketing themselves as widely and effectively as do universities; (ii) promoting their strengths to overcome outmoded views of VET: contemporary courses and innovative teaching and pathways; (iii) engaging more effectively with potential students and their school advisers; and (iv) providing more flexible course options and an attractive social environment. What is evident here is that these initiatives need to be broadly directed to engage and inform parents, teachers, guidance officers and members of the community, as well as school students. That is, the familiars that shaped their decision-making.

It is noteworthy that the informants suggested that VET institutions were poorly represented at events that students and parents might participate, and teachers might be involved, such as career evenings. It was noted that universities directed greater effort to these activities and the materials they have available were more attractive to those being offered by vocational education institutions. There were also concerns here about the way that vocational education institutions were presenting themselves as being very narrowly focused and not always in ways that are attractive to young people or their parents. So, much attention was given to how vocational education should market itself to the community and familiars, which goes beyond just students alone.

It was suggested by informants that school students generally had limited or even no knowledge of what VET courses are like – they saw them mostly as 'practical', 'hands-on', which they compared to 'intellectual' university-level courses. School students who had experienced VET were often surprised that it was not just practical. The suggestions below are in addition to the need to promote the benefits of a VET course, such as acquiring practical skills, being immediately employable on graduation, etc. Possible responses included marketing materials, video, YouTube etc., showing the full range of VET courses and how these link with the demands of modern industry as well as prepare for changing jobs in the future; organising school student visits, expose them to examples of innovative teaching (not just talks) so they can get a feel for what being a VET student might be like; and publicly

388 S. Billett et al.

championing the expertise of VET teachers in the way that universities do; the corollary is that VET institutions need to consistently show their staff that teaching is valued within the organisation.

It was also suggested by these informants that because schools are a major source of VET students, these should be important for vocational education institutions. Yet, schoolteachers and career advisers consistently compared their interactions with VET institution unfavourably with those of universities, both in terms of access and in obtaining individual advice on behalf of students. Also, as these teachers frequently reported having no personal experience of VET, they may also need guidance about course requirements and enrolment processes. So, it was suggested by these school administrators and career guidance officers that vocational education institutions:

- Be more pro-active with schools talk to schools about how VET institutions can improve the interactions in person and online for teachers and career advisers seeking information about VET on behalf of students;
- Have a dedicated phone number or email contact that allows easy and direct communication between staff in the two kinds of institutions;
- Provide other channels for introducing school students to VET, e.g., summer programs for high school students, 'trade taster' courses;
- Develop short videos for both teachers and students that present a lively picture of contemporary VET and the occupations it serves; and
- Visit schools to build on the interest in VET already shown by students enrolled in VET courses and be prepared for the need for individual advice; or facilitate visits to VET institutions by such students (grouped by interests) and also provide individualised advice.

So, much of the focus of these activities is to engage with teachers, career guidance officers and students to provide experiences and access to advice. That is, engaging with those who, within the school environment are likely to be influential in providing informed and impartial advice.

The informants also suggested that there was a key role for schools to assist in the process of that kind of advice which extended beyond their students to parents and caregivers, and other familiars who shape young people's decision-making.

Schools

Four main considerations for schools emerged from the consultations with school administrators and career guidance officers about advancing the level of parents', teachers' and students' knowledge of VET and engagement with schools in ways that also informed the attitude towards vocational education within the schools in terms of their educational provisions. It was concluded, firstly, that, parents are generally not knowledgeable about VET, nor strongly engaged with schools in career choices. A concern was that these parents may not have considered VET as a

viable post-school option for their child/children either through ignorance of its possibilities or as an unconsidered preference for university studies. In terms of engagement by schools with parents and caregivers, possible strategies include, (i) promoting VET as a worthwhile and viable option from when students first enrol, on the assumption that parents/carers are likely to be most engaged at that point; (ii) continually promoting VET through newsletters, other school communications with parents, career nights, parent-teacher interviews, etc., i.e. on every occasion there is a meaningful interaction with parents; and (iii) ensuring that parents are aware of government provided information on VET, e.g. the school could share the link to any digital material. So, it was suggested that schools had a role to engage with parents to promote their level of understanding, currency and information about vocational educational as much as university pathways.

However, and secondly, the emphasis on actions by schools is not just directed towards parents, it was suggested that teachers' development is also required because they are not always knowledgeable about VET or the occupations it serves. They often base the advice they provide to students, even inadvertently, on their own life experiences, which rarely include VET. Yet, students see their teachers as highly influential on career choices. In fairness, teachers often acknowledge no direct experience of VET and an incomplete knowledge of its offerings and enrolment procedures. So, VET institutions themselves can be more pro-active in their links with schools, but schools can also: (i) organise familiarisation tours of VET facilities for teachers, as part of teachers' professional development; and (ii) equip career advisers and others in the school who take on this role with sufficient knowledge to advise students realistically and individually. The concern here is that these members of school staff who have a high level of impact on young people's decision-making need to be more informed themselves to advise those students, and also their parents and guardians.

Thirdly, the groups of school administrators and guidance officers claimed that students did not seem very knowledgeable about VET post-school options. This claim is certainly supported by findings that showed that students' lack of knowledge of VET options post-school is sometimes due to lack of guidance on where to look for it, and sometimes to their disengagement from career advice processes. Specifically, it was suggested that schools do more to promote their students becoming more knowledgeable of the various postschool options. These include: (i) commencing the process of post-school options early in senior schooling; (ii) guiding students when they engage with websites that provide examples of VET training and related occupations; (iii) inviting high-profile VET graduates or celebrities to talk to students about VET as an alternative to university; and (iv) providing more personalised career information about VET and related occupations. What is evident here is that there is an identified need to go beyond what these high schools can provide and secure advice, insights and guidance from outside of them.

Fourthly, from within schools, there was some intentional support from school administrations for VET in school courses and school policy to promote VET pathways varied across the schools that were represented in the discussion groups. There was evidence that some schools hardly promoted VET as a worthwhile post-school

option, for reasons such as concerns about meeting parents' expectations about a focus on entry to higher education, undermining the public image of the school for academic achievement, because student enrolment in VET courses disrupted a school's academic profile, or was simply seen as too difficult to organise. Other schools were more pro-active in encouraging students to undertake VET courses, however. Amongst the strategies suggested for enhancing the status of VET, schools need to: (i) consistently and genuinely celebrate VET students' achievements alongside other student achievements; (ii) publicly acknowledge the contributions that VET and VET teachers make to a school's curriculum; and (iii) adopt policy that VET is regarded by the school as legitimate a choice for postschool pathways as university entry.

In these ways, it is suggested that schools need to inform the proximal zones of influence that shape young people's decision-making by providing advice to parents and carers, assisting with the quality of advice that is shared approximately within the school between teachers and guidance officers with students and their parents. Moreover, it was suggested that the needs for conscious efforts to mediate, rather than contribute to negative societal sentiment about vocational education and the occupations it serves.

Yet, perhaps the strongest source of addressing the relatively low SVEOS needs to be enacted through the efforts of government and industry. Such sentiments are not inherent, culturally determined or irreducible. Instead, they can be promoted through the actions of institutions such as government, professional bodies, employers' associations and unions. It is these that need to inform more broadly the societal sentiments about occupations and vocational education that envelops the zone of influence that shape young people's decision-making.

Government and Industry

Schools and VET institutions, mostly do not have the capacity or resources to present, let alone advise, about the range and kinds of occupations and available post-school educational provisions. Moreover, if they were to promote vocational provisions, this might be seen as institutional marketing, rather than being in the public interest.

Yet, the kinds of occupational capacities developed through the vocational education system are in the public interest because they are essential for national, community and individual needs and well-being. This is not fanciful or without precedent. In Germany, the valuing of skilled work (i.e., Beruf concept) plays a prominent role in underpinning the national effort associated with skilful work (Deissinger, 2009). This includes parents valuing apprenticeships to such a degree that they supplement the training wage provided in German apprenticeship systems which is a fraction of those available in a country like Australia. Moreover, there is a network of chambers of commerce that actively promote and organise vocational education at the local level. Recently, societal sentiments in Switzerland led to

government reinforcing apprenticeships, given concerns about young people participating in tertiary education programs with little in the way of employment prospects (Stalder & Lüthi, 2020). So, in these instances when the societal sentiment is moderated and mediated by key institutions, change can be realised.

Therefore, it requires higher level leadership, from government and industry, to demonstrate, and champion the significance of such occupations and their demands and requirements of skilful work associated with VET. That is, to emphasise the central role of these occupations in meeting national social and economic goals and the benefits to individuals. As in other countries, there is a need for industry sector-level initiatives to enhance the attractiveness of VET. Some of these may well be long-term strategies. So, in addition to the public education strategies for VET, specific strategies might include means of making vocational education more attractive to young people and their parents and also promoting the standing and quality of VET -related occupations. Such long-term efforts need to be enabled by key institutions such as government, industry and schools.

It was suggested in the discussion groups that VET institutions in Australia have an image problem – buildings and facilities are generally seen as old and unattractive in comparison to universities. Also, whilst efforts are made to present VET institutions as resembling workplaces, there is also a need for these environments to be convivial and attractive to young people. It seems that university campuses are perceived to offer a more attractive social and physical environment than those in VET institutions. So, there is a need to: (i) secure the direct involvement of industry, enterprises and professional associations in promoting occupations that are prepared for within VET; and (ii) portray modern facilities in any broad public presentation of VET as a social marketing tool.

As in countries where vocational education systems are mature and well valued, there is a need for industry sectors, particularly those with skills shortages, to actively engage and promote those occupations in ways that are realistic (i.e. to avoid misinformation and disappointment), to indicate pathways and opportunities for advancement (i.e. to cater to aspirational young people and their parents) and to inform the community about the kind of work activities undertaken and the contributions of those activities (i.e. promoting the worthiness of those occupations). The informants suggested that industry bodies and enterprises could: (i) be more proactive in being represented at schooling events and sponsoring VET scholarships and internships; (ii) organise localised events where parents can share their stories of occupations and career passages with others, and at the same time learn from others about diverse occupations and pathways; (iii) identify how they can assist young people who are undecided about their postschool pathways can come to understand the requirements for VET; and (iv) promote and champion the changing face of VET and related occupations and support key teachers and career advisers to attend VET events, to be better informed and enthusiastic about VET.

This set of suggestions provides some specific bases for attempting to enhance SVEOS. What is evident in these suggestions is that actions need to be taken at the national, regional and local level and through collaboration amongst schools, VET institutes and also employers or their representatives. However, ultimately, these

efforts are directed at informing not just school students, but also those who shape their decision-making. In many ways, it points to a systemic and collaborative approach to informing the zones of influence that are serving to shape that decision-making, as foreshadowed in Fig. 18.2.

Enhancing the Status of Vocational Education and the Occupations It Serves

Evident across the literature and the detailed empirical data arising from this Australian study (Choy et al., 2022; Hodge et al., 2022) is that concerted action is required to enhance SVEOS. Moreover, that action needs to be directed to not just young people, but those familiars who intentionally or unintentionally shape their decision-making about postschool pathways. What has been suggested here is that there is a need to reset and recast the societal sentiment about vocational education and the occupation it serves, through the action of key institutions. It is suggested that by informing and having initiatives at the local level that seeks to engage and inform those familiars (i.e., parents, teachers, peers) change at the local level can incrementally reshape societal views about SVEOS. That resetting will help establish a societal milieu in which it will be easier and more productive to advance impartial advice about postschool pathways, including vocational education. Undoubtedly, it would be beyond the scope of such efforts to achieve parity between vocational education and higher education, but it is important that the distinctions between what these key options have to offer young people are presented in a comprehensive and impartial way.

Yet, beyond conscious efforts to promote a more positive societal sentiment, there is also the need to promote a more informed set of suggestions and advice. Together, these processes that will potentially lead to more impartial and comprehensive advice being advanced within the local zones of influence in which young people engage and that shape their decision-making about postschool pathways. It is within these zones that parents, teachers, career guidance officers and others might more carefully and openly provide guidance and assistance to young people's decision-making, and also young people are themselves more open to and informed about a range of postschool pathways.

Hence, what has been proposed in this final chapter of the Australian study is the need for action by key institutions (i.e., government, schools, vocational education institutions, and businesses) to establish a more positive societal sentiment about vocational education and the occupations it serves. This in turn may well assist these local zones of influence on young people's decision-making to be more open, informed and impartial. Such efforts also will assist young people in making more informed decisions about postschool pathways, not the least, making efforts to align those pathways with their capacities and interests.

All of this might seem to be overwhelming and hard to achieve. Yet, without the development of the capacities developed through vocational education, it will be increasingly difficult for individuals, communities and nations to be provided with the range of goods and services that they want, and in particular, to be reasonably self-reliant in doing so. In changing times, with uncertain futures, a consideration of self-reliance seems to be one which is increasingly attractive for nation states.

References

- Aarkrog, V. (2020). The standing and status of vocational education and training in Denmark. *Journal of Vocational Education and Training*, 72(2), 170–188.
- Aarkrog, V. (2022). Chapter 13: The significance of learning environment and decision-making for enrolment in and completion of VET: A Danish case. In S. Billett, B. E. Stalder, A. Vibe, S. Choy, S. Hodge, & A. H. Le (Eds.), The standing of vocational education and the occupations it serves: Current concerns and strategies for enhancing that standing. Springer Nature.
- Bedson, L., & Perkins, D. (2006). A positive influence: Equipping parents to support young people's career transitions. Brotherhood of St Laurence.
- Billett, S. (2014). The standing of vocational education: Sources of its societal esteem and implications for its enactment. *Journal of Vocational Education and Training*, 66(1), 1–21.
- Billett, S. (2020). Perspectives on enhancing the status of vocational education and the occupations it serves. *Journal of Vocational Education and Training*, 72(2), 161–169.
- Billett, S., & Le, A. H. (2022a). Chapter 4: Improving the standing of VET: Perspectives from countries with developing economies. In S. Billett, B. E. Stalder, A. Vibe, S. Choy, S. Hodge, & A. H. Le (Eds.), *The standing of vocational education and the occupations it serves: Current concerns and strategies for enhancing that standing*. Springer Nature.
- Billett, S., & Le, A. H. (2022b). Chapter 4: Improving the standing of VET: Perspectives from countries with developing economies. In S. Billett, B. E. Stalder, A. Vibe, S. Choy, S. Hodge, & A. H. Le (Eds.), *The standing of vocational education and the occupations it serves: Current concerns and strategies for enhancing that standing*. Springer Nature.
- Billett, S., Choy, S., & Hodge, S. (2020). Enhancing the standing of vocational education and the occupations it serves: Australia. *Journal of Vocational Education and Training*, 72(2), 270–296.
- Billett, S., Choy, S., Hodge, S., & Le, A. H. (2022). Chapter 15: Investigating enhancing the standing of vocational education and the occupation it serves: Purposes, processes and phases. In S. Billett, B. E. Stalder, A. Vibe, S. Choy, S. Hodge, & A. H. Le (Eds.), The standing of vocational education and the occupations it serves: Current concerns and strategies for enhancing that standing. Springer Nature.
- Bisson, R., & Stubley, W. (2017). After the ATAR: Understanding how gen Z transition into further education and employment. Year13. Retrieved from https://youthsense.com.au/research
- Cedefop. (2017). European public opinion survey on vocational education and training (Cedefop research paper no. 62). Publications Office of the European Union. https://doi. org/10.2801/264585
- Choy, S., Le, A. H., Billett, S., & Hodge, S. (2022). Chapter 17: Surveys of students, parents and teachers (Phase 2). In S. Billett, B. E. Stalder, A. Vibe, S. Choy, S. Hodge, & A. H. Le (Eds.), The standing of vocational education and the occupations it serves: Current concerns and strategies for enhancing that standing. Springer Nature.
- Clement, U. (2014). Improving the image of technical and vocational education and training Retrieved from Bonn. Germany: GTZ.

- Cole, M. (1985). The zone of proximal development where culture and cognition create each other. In J. V. Wertsch (Ed.), *Culture, communication and cognition: Vygotskian perspectives* (pp. 146–161). Cambridge University Press.
- Crawford, M. B. (2000). Shop class as soulcraft. Penguin Press.
- Creed, P. A., Patton, W., & Hood, M. (2010). Career development and personal functioning differences between work-bound and non-work bound students. *Journal of Vocational Behavior*, 76(1), 37–41.
- Dalley-Trim, L., Alloway, N., & Walker, K. (2008). Secondary school students' perceptions of, and the factors influencing their decision-making in relation to, VET in schools. *The Australian Educational Researcher*, 35(2), 55–69.
- Deissinger, T. (2009). Curriculare Vorgaben für Lehr-Lernprozesse in der beruflichen Bildung. In B. Bonz (Eds.), *Didaktik und Methodik der Berufsbildung* (Berufsbildung konkret vol. 10, pp. 60–88). Hohengehren: Schneider.
- Deissinger, T. (2022). Chapter 5: The standing of dual apprenticeships in Germany: Institutional stability and current challenges. In S. Billett, B. E. Stalder, A. Vibe, S. Choy, S. Hodge, & A. H. Le (Eds.), *The standing of vocational education and the occupations it serves: Current concerns and strategies for enhancing that standing*. Springer Nature.
- Fuller, C., McCrum, E., & Macfadyen, T. (2014). Teachers' knowledge and experiences of information advice and guidance: Some implications for the current policy context in England. Education Inquiry, 5(22), 23922.
- Galliott, N. (2017). Online career guidance: Does knowledge equate to power for high school students? *Journal of Psychologists and Counsellors in Schools*, 27(2), 190–207.
- Gaylor, L., & Nicol, J. J. (2016). Experiential high school career education, self-efficacy, and motivation. *Canadian Journal of Education*, 39(2), 1–24.
- Gergen, K. J. (2000). The saturated self: Dilemmas of identity in contemporary life. Basic Books.
- Gore, J., Holmes, K., Smith, M., Lyell, A., Ellis, H., & Fray, L. (2015). Choosing university: The impact of schools and schooling. Final report to the National Centre for student equity in higher education. University of Newcastle.
- Gore, J., Ellis, H., Fray, L., Smith, M., Lloyd, A., Berrigan, C., Lyell, A., Weaver, N., & Holmes, K. (2017). Choosing VET: Investigating the VET aspirations of school students. NCVER.
- Hargreaves, J., & Osborne, K. (2017). Choosing VET: Aspirations, intention and choice. NCVER. Hawkins, C. L. (2017). Do aspirations really matter? Australian & International Journal of Rural Education, 27(3), 39–54.
- Haybi-Barak, M., & Shoshana, A. (2020). Separatist biopolitics: The dual discourse of the vocational education policy in Israel. *Journal of Vocational Education and Training*, 72(2), 297–314.
- Hiim, H. (2020). The quality and standing of school-based Norwegian VET. *Journal of Vocational Education and Training*, 72(2), 228–249.
- Hodge, S., Billett, S., & Choy, S. (2022). Chapter 16: Influences on post-school decision-making: Perspectives of school students, parents, teachers (Phase 1). In S. Billett, B. E. Stalder, A. Vibe, S. Choy, S. Hodge, & A. H. Le (Eds.), The standing of vocational education and the occupations it serves: Current concerns and strategies for enhancing that standing. Springer Nature.
- Krause, K. L., Vick, M., Boon, H., Bland, D. C., & Clark, J. A. (2009). A fair go beyond the school gate? Systemic factors affecting participation and attainment in tertiary education by Queensland students from LSES backgrounds. Queensland Department of Education and Training.
- Lamb, S., Maire, Q., Walstab, A., Newman, G., Doecke, E., & Davies, M. (2018). *Improving participation and success in VET for disadvantaged learners* (Research report). National Centre for Vocational Education Research (NCVER).
- Le, A. H. (2022). Chapter 11: Perspectives on informing post-school pathways: A Vietnamese case study. In S. Billett, B. E. Stalder, A. Vibe, S. Choy, S. Hodge, & A. H. Le (Eds.), The standing of vocational education and the occupations it serves: Current concerns and strategies for enhancing that standing. Springer Nature.

- Martínez-Morales, I., & Marhuenda-Fluixá, F. (2020). Vocational education and training in Spain: Steady improvement and increasing value. Journal of Vocational Education and Training, 72(2), 209–227.
- McIlveen, P., Morgan, T., & Bimrose, J. (2012), A longitudinal study of the experience of a career development program for rural school students. Australian Journal of Career Development, 21(1), 22–30.
- Pantea, M. C. (2022). Chapter 14: Elevating the standing of vocational education and training in Romania. In S. Billett, B. E. Stalder, A. Vibe, S. Choy, S. Hodge, & A. H. Le (Eds.), The standing of vocational education and the occupations it serves: Current concerns and strategies for enhancing that standing. Springer Nature.
- Phillips, M. (2012). Why should we care about vocational education? Edutopia. Retrieved from: www.edutopia.org/blog/vocational-education-benefits-mark-phillips
- Rainey, L., Rainey, L. M., Simons, M., Pudney, V., Pudney, V. A., & Hughes, E. (2008). What choice? An evaluation of career development services for young people. NCVER.
- Rintala, H., & Nokelainen, P. (2020). Standing and attractiveness of vocational education and training in Finland: Focus on learning environments. Journal of Vocational Education and Training, 72(2), 250–269.
- Rose, M. (2004). The mind at work: Valuing the intelligence of the American worker. Viking Press. Rothman, S., & Hillman, K. (2008). Career advice in Australian secondary schools: Use and usefulness (LSAY research reports, no. 53). ACER.
- Sennett, R. (2008). The craftsman. Yale University Press.
- Stalder, B. E., & Lüthi, F. (2020). Job resources and career success of IVET graduates in Switzerland: A different approach to exploring the standing of VET. Journal of Vocational Education and Training, 72(2), 189-208.
- UNESCO-UNEVOC. (2018). Short summary of the virtual conference on improving the image of TVET: Making TVET attractive to youth. Retrieved from https://vocationsandlearning.files. wordpress.com/2019/10/vc_synthesis_21_final.pdf
- Valsiner, J. (1998). The guided mind: A sociogenetic approach to personality. Harvard University Press.
- Valsiner, J., & van der Veer, R. (2000). The social mind: The construction of an idea. Cambridge University Press.
- Veillard, L. (2022). Chapter 7: Alternance training as a way to improve attractivity of vocational education program in France. In S. Billett, B. E. Stalder, A. Vibe, S. Choy, S. Hodge, & A. H. Le (Eds.), The standing of vocational education and the occupations it serves: Current concerns and strategies for enhancing that standing. Springer Nature.
- Webb, S., Black, R., Morton, R., Plowright, S., & Roy, R. (2015). Geographical and place dimensions of post-school participation in education and work. NCVER.

A

Alternance training, 7, 30, 140–157	Communism, 289
Apprenticeship, 9–11, 26, 30, 39, 51, 53–55,	Confucian culture, 224, 241, 244
59, 64, 68, 79, 84–98, 113–115, 141,	Covid-19, 50, 152, 303, 304
142, 144, 145, 151–157, 165, 179, 180,	Cultural factors, 75, 118, 123
188, 189, 192, 193, 204, 205, 207–210,	
213, 217, 248–253, 256–258, 261, 262,	
267, 269, 275, 289, 311, 312, 335, 338,	D
355, 368, 390, 391	Decision-making, 4, 6–9, 11–15, 20–22,
Attractiveness, 7, 8, 11, 24, 26, 30, 58, 70–73,	27–33, 35–42, 67, 68, 75, 77, 104,
126, 140, 150, 160, 161, 163, 171, 178,	106–109, 112, 115–132, 184, 224,
180–186, 189, 190, 194, 195, 232, 242,	233-236, 238-244, 252, 266-282,
248, 268, 270, 297, 317, 318, 320, 329,	310-318, 321, 322, 326-328, 330,
330, 340, 345, 367, 375, 385, 387, 391	332–335, 337, 338, 341, 344–350,
Australia, 7, 8, 20, 27, 29, 32, 51, 69, 84, 104,	354–364, 366, 368, 369, 374–378,
105, 109, 112, 114, 116, 119, 230, 236,	380–382, 384, 385, 387, 392
310-312, 321, 329, 330, 349, 355, 356,	Developing economies, 4, 20, 23, 26, 64–66,
358, 375, 376, 380, 390, 391	68, 69, 78, 80, 104, 113, 233, 310
	Different perspectives, 107, 181, 249
	Distal influences, 34, 37
C	Drop-out, 202, 209, 214, 215, 279
Career choice, 29, 31, 33, 68, 107, 115, 117,	Dual system, 8, 10, 84-98, 113, 213, 267, 288,
121, 122, 129, 131, 182, 205, 210, 219,	291, 293, 294, 302, 303
316, 317, 369, 384, 388, 389	
Career development, 8, 14, 26, 28, 29, 31, 32,	
68, 71, 72, 115, 116, 118, 119, 122,	\mathbf{E}
124, 130, 146, 261, 262, 381–383	E&T policy, 50, 51
Career success, 249, 252, 253	Education policies, 11, 148, 156, 160, 161,
Challenges in VET, 8, 13, 162, 193, 202, 207,	172, 207, 218
209, 210, 212, 213, 232, 288	Education practices, 110
Chambers of commerce, 64, 78, 79, 113, 291, 390	Employability, 11, 27, 59, 80, 162, 179, 187–190, 192, 194, 228, 329, 340
271, 370	107-170, 172, 177, 220, 327, 340

Collaboration VET schools - companies, 298

 $\ensuremath{\mathbb{O}}$ The Author(s), under exclusive license to Springer Nature Switzerland AG 2022

S. Billett et al. (eds.), *The Standing of Vocational Education and the Occupations It Serves*, Professional and Practice-based Learning 32, https://doi.org/10.1007/978-3-030-96237-1

Employers, 4, 8, 10–12, 14, 24, 26, 30, 39, 53–56, 59, 65, 67, 70, 71, 74, 75, 77–80, 86, 88, 89, 91–98, 110, 113, 115, 120, 140–142, 144, 145, 147, 149–151, 154, 156, 166, 170, 178–196, 202, 211, 233, 248, 251, 260, 267, 288, 292, 295, 299, 302–304, 311, 314, 321, 335, 385, 386, 390, 391 Enrolment, 8, 11, 24, 29, 70, 71, 80, 120, 126, 128, 161, 163, 171, 189, 193, 228, 230, 232, 233, 237, 248, 266–282, 388–390 Esteem, 23, 26, 51, 53, 59, 84, 87–92, 113, 114, 162, 166, 180–182, 184, 301,	301, 310, 311, 317, 318, 326, 327, 329, 334–337, 339–350, 355–357, 366, 374, 375, 380, 384, 390, 392 High school, 31, 32, 70, 74, 91, 108, 109, 115, 116, 120, 121, 126, 127, 129, 131, 229, 277, 290–293, 296, 299, 301–303, 312, 314, 315, 319–321, 330, 334, 357, 376, 381, 384, 388, 389 Historical factors, 72–73, 195 History of vocational education, 144 Holistic vocational competence, 216
347, 374	I
European Commission, 160, 172, 292, 302 F	Impartiality, 13, 40, 41, 65, 368, 369 India, 7, 8, 11, 12, 58, 70, 76, 178–196 Industrial Training Institutes (ITIs), 178–180, 183–195
Finland, 7, 8, 10, 25, 27, 111, 112, 160–172,	Influencers, 76
272, 379, 381 Flexibility, 87, 160, 165, 167, 169, 170, 346,	Institutional factors, 8–11, 21, 22, 33, 71, 73–75, 105–118, 125–132, 290,
350, 357, 386	295, 355
France, 7, 10, 58, 140–157	Integration of theory and practice, 207
Funding, 27, 50, 74, 77, 155, 165, 170–172, 269, 273, 278, 290, 292, 311, 312, 344	Interviews, 8, 12, 31, 36, 38, 126, 183–190, 192, 194, 195, 224, 236–240, 274–279, 288, 296, 301, 303, 313–317, 320, 321, 330, 333, 334, 336, 345, 346, 359,
G	378, 389
Germany, 4, 5, 7, 9, 10, 23, 50, 53, 66, 79, 84–98, 113, 125, 151, 156, 302, 303, 310, 374, 390	Investment in training, 192, 193
Global agencies, 77, 79, 80	J
Guidance, 13, 22, 27–37, 40, 41, 67, 76, 107, 112, 115, 117–120, 124, 127, 131, 132, 143, 163, 167, 170, 231, 234, 240, 242,	Job satisfaction, 252, 253, 260, 358, 360
244, 269, 273, 276, 278, 280, 282, 312,	L
316, 328, 354, 356, 362, 368, 376, 378, 381, 382, 384, 386–390, 392	Labour market, 9–11, 30–32, 50, 51, 54–57, 71, 72, 86, 87, 89–92, 107–109, 124, 130, 145–150, 154, 155, 160, 161, 163, 167, 169, 181–192, 194, 195, 205, 216, 230, 232, 252, 261, 274, 329, 355,
HE expansion, 9, 51	383, 384
Higher education, 5, 10, 13, 14, 20, 50, 52–55,	Learning opportunities, 8, 213, 250, 252–254,
65–67, 70, 71, 73, 74, 84, 85, 87,	256, 259
89–92, 97, 104, 105, 108–116, 118,	Learning pathways, 160, 164, 171, 172
122, 123, 125, 126, 128, 130, 131, 140, 141, 146–149, 151, 152, 154–156, 160,	Lifelong learning, 56, 162, 164, 169, 170 Local factors, 26, 180
161, 163, 167, 172, 178, 180, 182, 184,	2004 1401010, 20, 100
189, 191, 205, 206, 208, 218, 224, 228,	
234, 248, 249, 251, 253, 259, 260, 262,	M
266, 267, 269, 289–291, 293, 295–297,	Migration, 89, 289-291, 294, 301, 303

U	Precarious work, 298, 299, 301
Occupational choices, 117, 273, 331–333, 342	Productivity, 27, 50, 59, 115, 182, 186,
Occupational commitment, 249, 252–254,	192–194, 206, 207, 231, 294
257, 260	Proximal influences, 34, 35, 347
Occupational preference, 315, 330, 348	
Occupational training, 228, 229	
	Q
	Quality, 8, 10, 25–28, 31, 35, 50, 55, 56, 58,
P	59, 64, 67, 72–74, 84, 86, 87, 95–98,
Parents, 4–6, 8–14, 20–22, 26, 28, 30–36,	107, 110–113, 115, 124, 151, 160, 170
38–42, 51, 52, 64–71, 73–77, 79, 81,	178, 179, 181, 186–190, 192, 194, 195
89, 104, 106–109, 112, 114–116,	202–219, 231–233, 248–251, 253–256
118–128, 130–132, 150, 154, 167, 169,	259, 261, 262, 269–273, 277, 280, 281
183–185, 191, 194, 208, 224, 225,	288, 289, 291–295, 297, 311, 327, 329
233–244, 249, 261, 273, 275, 277, 278,	337, 340, 356, 369, 379–381, 383,
281, 282, 290, 294, 296–299, 302, 310,	386, 390
312–317, 319–322, 326–350, 354–369,	Quality of training, 11, 27, 112, 186, 188, 189
374–378, 381–392	194, 195, 248, 271, 380
Parents' perspective, 241	Quality of VET, 30, 71, 72, 77, 97, 170, 182,
Parity, 9, 24, 28, 42, 51–53, 112, 115, 182,	219, 232, 276, 391
381, 392	
Parity of esteem, 6, 54, 57–59, 162, 163, 171,	n.
181, 183, 187	R
Personal practices, 9, 14, 21, 105–107, 109,	Rational, 13, 29, 33, 55, 75, 119, 277–282,
118, 125–132, 355	327, 328, 382
Policy, 7–11, 13, 15, 22, 24–27, 30, 35, 37, 38,	Reforms, 9, 13, 22, 25, 27, 29, 53, 56, 75, 77,
50–52, 56, 58, 59, 69, 71, 77–80, 87,	111, 112, 114, 119, 141, 148, 149, 151 155, 161, 165–166, 168–170, 172, 195
94, 96, 97, 105, 106, 110–111, 116, 118, 127, 129, 140, 145, 146, 150, 155,	202, 205–207, 209, 213, 214, 216–219
156, 160–161, 165–166, 171, 172, 180,	224, 225, 229–233, 235, 266–273,
182, 193, 202, 208, 209, 211, 224, 225,	280–282, 288, 290, 296–298, 302, 311
229–232, 237, 243, 266, 270–271,	329, 379–382
288–292, 295–298, 302–304, 311, 328,	Romania, 7, 10, 70, 288–304
329, 344, 345, 348–350, 355, 356, 358,	Rural, 31, 110, 116, 120, 124, 130, 141, 184,
378–380, 386, 389, 390	288, 290, 293, 294, 297, 299, 356,
Post-school, 4–6, 8, 11–13, 20, 21, 23, 25, 26,	383, 384
31–33, 37, 38, 65–67, 72, 104–106,	565, 561
108–110, 112–115, 118, 120–123,	
127–132, 224, 225, 232–235, 237–239,	S
241–244, 310–313, 319, 320, 326–329,	School-based system, 140, 144, 155, 156
331, 333, 336, 338, 339, 344–347,	Situational resources, 250–256, 259, 261
354–357, 362–366, 368, 375, 384–387,	Skills economy, 27, 50, 59
389, 390	Social inclusion, 27, 52, 162, 169, 172, 289,
Post-school decision making, 326–350	296, 302–303
Post-school pathways, 4, 7, 8, 11–14, 20–23,	Standing, 4-14, 20-42, 50-59, 64-81, 84, 85,
29, 31–33, 36–42, 52, 66–68, 73,	88, 91, 97, 106, 110, 111, 122, 150,
104–132, 224–244, 273, 277,	154, 157, 160–172, 180, 181, 185, 187
311–314, 317, 318, 326–336,	190–192, 195, 224, 225, 229, 230,
338–340, 342, 343, 345, 349,	232-237, 239, 248-262, 275, 276, 281
354–369, 374–393	282, 288, 310, 311, 314, 318, 354, 355
Pragmatic, 35, 110, 149, 294, 311, 327, 328,	357, 358, 362, 369, 374, 378, 380,
333, 335, 339, 376, 377	385, 391

Standing of vocational education, 4–15, 56, 64–67, 78, 110, 111, 115, 195, 229, 236, 248–249, 288–304, 310–322, 326, 329, 343, 348, 349, 354, 357–359, 363–366, 374, 375, 379, 380, 387–392 Status, 4, 6, 7, 10, 11, 20–42, 52, 54, 57, 58, 66–68, 72, 73, 80–81, 92, 97, 104, 107, 108, 111–118, 124–128, 131, 148, 161, 166–172, 180–182, 184, 186, 194, 196, 202–219, 225, 232–233, 235, 248, 266, 288, 289, 296, 298, 300, 301, 310–313, 316, 319, 321, 322, 330, 336, 337, 342, 345, 347–350, 355–358, 360, 374–376, 380, 381, 383, 384, 390, 392–393 Strategies, 7, 8, 14, 15, 22, 24, 26, 27, 34–41, 51, 52, 58, 59, 66, 112, 114, 143, 148, 161, 193, 195, 231–233, 243, 252, 289, 290, 292, 296, 299, 300, 313, 314, 316, 319–322, 337, 341, 345, 349, 378, 380, 385–392	T Teacher competences, 217 Teachers, 4, 8, 10, 12–14, 21–23, 28–30,
Student preferences, 243 Students, 5, 7–14, 20, 24–33, 36, 38, 39, 41, 50–53, 55–57, 64, 66–68, 70–74, 76–79, 105–132, 143–151, 154, 156,	U UNESCO-UNEVOC, 4–7, 11, 20, 23, 24, 66, 68–69, 80, 104, 108, 113, 115, 118,
160–169, 171, 178, 179, 183–185, 187–189, 191, 194, 202–219, 224, 226, 228–231, 233, 235–244, 248, 259, 266–282, 290–295, 297, 299,	131, 224, 233, 310, 312, 326, 354, 355, 358, 386
301, 303, 311–317, 319–322, 326–350, 354–369, 375, 376, 378–390, 392	V VET attractivity, 68, 170, 180, 181, 186 VET curricula, 281, 297
Students' perspective, 76, 178	VET graduates, 8, 10–12, 20, 25, 33,
Subsidiarity, 87, 88, 92–97	71, 73, 113, 163, 168, 187, 189,
Support, 4, 9, 10, 22, 24, 25, 27, 28, 32–34,	231, 310, 389
36–37, 39, 40, 55, 64, 67, 71, 73–75,	VET model, 202, 204-207, 209-211, 291
77, 78, 80, 87, 115–118, 121, 122, 124,	VET policy, 77, 181, 204, 295, 302
127, 128, 145, 162, 165, 169–172, 184,	VET quality, 231, 232
191, 194, 195, 210, 226, 234, 238, 242, 250, 251, 259, 261, 262, 269, 272–276,	VET teacher education, 25, 207–209 Vietnam, 7, 8, 12, 224–229, 231–236, 238,
278, 290, 292, 294, 311, 314, 321, 329,	241, 244
344, 349, 356, 362, 366, 375, 376, 378,	Vocational assessment, 56, 57
381, 386, 389, 391	Vocational education and training (VET),
Surveys, 8, 13, 31, 112, 114, 119, 121, 122,	4–15, 20–42, 50–59, 64–81, 84, 85,
124, 126, 127, 161, 162, 166, 183, 224,	87–98, 104–107, 109–115, 117–120, 122, 124–132, 140, 141, 144, 145,
236, 239–244, 252–254, 260, 278, 279, 313, 314, 317–322, 354, 355, 358–369,	122, 124–132, 140, 141, 144, 143, 147–156, 160–172, 178–196, 202–205,
376, 383, 385	207–219, 224–244, 248–262, 266–282,
Switzerland, 4-7, 12, 14, 22, 23, 25, 79, 84,	288–304, 310–322, 326, 327, 329, 330,
90–92, 97, 111, 151, 248–262, 374,	335–337, 339–350, 354–369, 374,
380, 390	375, 378–393

Vocationalisation of higher education, 91 Vocational learning, 9, 51–53, 91, 261 Vocational relevance, 10, 202–204, 207–209, 211–219 Vocational route, 9, 50–52, 54–56, 59, 146, 148, 151, 156 Vocational Training Act, 86, 87, 93, 94, 97

W Workplace learning, 92, 140, 142, 150, 151, 160, 250 Y
Young people's decision-making, 8, 20–24,
33–37, 39, 40, 52, 67, 68, 75, 76,
104–132, 224, 234–237, 239, 240, 243,
269, 270, 273, 276, 277, 280, 312–314,
316–318, 326–330, 349–350, 354, 356,
357, 359, 362, 363, 366, 374–393
Youth education, 168, 170–172, 267, 268,
272, 281

Z Zones of influence, 22, 23, 33–37, 374–393