



# Student Retention and Success in Higher Education

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Institutional Change for the 21st  
Century

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*Edited by*

Mahsood Shah · Sally Kift · Liz Thomas

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# Student Retention and Success in Higher Education

“Exploring student success and retention through a cross-section of conceptualizations, definitions, models, approaches, institutions and countries, this book offers a deep and wide range of ideas for consideration. Through the lenses of data, evidence, scholarship, research and reflexivity, the reader is challenged to examine their own and broader assumptions about the complex and challenging areas of University student retention and success”.

—Marcia Devlin, *Former Senior Vice-President and Senior Deputy Vice Chancellor, Victoria University, Australia*

“Drawing on research evidence and practical examples from Australia, South Africa, Europe and the US this book offers a valuable evidence-led and highly reflexive account of student success and student retention. The book is rooted in the firm belief that institutional change is the key to improving student success, and it provides research informed practical guidance about how to achieve this. The authors encourage us to think deeply and carefully about what we mean by the term student success. This is essential reading for higher education leaders, policy makers, teaching staff, and researchers, as we work together to develop and implement approaches that support student diversity and success”.

—Susan Orr, *Pro Vice Chancellor for Learning and Teaching, York St John University, UK*

Mahsood Shah • Sally Kift • Liz Thomas  
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# Preface

Higher education has experienced huge disruption due to the global pandemic. No one predicted the scale at which the pivot to remote learning would impact institutions, staff, students and other stakeholders. The use of digital technology in teaching and assessing student learning is becoming the norm, and institutions are finding innovative ways to provide various academic and non-academic support services online. The pace of change is swift and accompanied by an increased focus on efficiency. Whilst the intent of the changes may have been anticipated in institutional strategy or cyclical review process, the disruption caused by the pandemic has accelerated rapid change at a scale that has not been experienced in the past. Some of the key changes include the restructuring and downsizing of faculties and central support units, building digital capability to teach and support students online, course rationalisation, and reduction of teaching and support staff. These changes are already impacting institutions' ability to provide high-quality learning experience to students. In Australia, for example, the most recent Quality Indicators for Learning and Teaching (QILT) data suggest a significant decline in student experience results compared to previous years. While the national data on student retention is not yet available, the disruptions caused will have an undoubted impact on student retention and success, given the pervasive and frequently cumulative impact of the pandemic on

the student experience—academically, personally, logistically, financially, geographically and psychosocially.

Student retention and success have been institutional priorities and the subject of intensive research effort for decades. Many institutions have set targets to improve student retention and success at institutional level and for different profiles of students. The global COVID-19 pandemic is providing new insights into issues that are impacting retention, success and the student experience for all students, as educational disadvantage has both broadened and deepened and structural inequalities have been underscored. Inequities across the student lifecycle, and at all levels of study, have been exposed and exacerbated.

Traditionally and despite the already high volume of online education, institutions have aligned student support resources and facilities to predominantly on-campus delivery and left the social experience of learning to face-to-face engagements. The transition to fully online learning has challenged the default delivery mode and is providing new insights on a wide range of critical student experience issues, including support for the mental health and well-being of students and staff; mitigating financial precarity and digital poverty; mediating student engagement in the online study; enabling peer support and social belonging interactions; harnessing data intelligence and policy accommodations for proactive interventions; and assuring the quality of learning, teaching, assessment and support using digital technology for student success. The quality and efficacy of needed-now 24/7 student services and support has been a particular challenge. While some institutions had mature support systems in place, the pandemic has forced all providers to deeply examine the extent to which such support systems are fit for purpose for a fully online or blended mode of learning.

In 2021, efforts to improve student retention and success are more important than ever as nations turn to education and training to rebuild from the current global health, economic, social and educational crises. Failure to re-imagine learning, teaching, assessment and support methods for a better post-pandemic normal would be a gross breach of higher education's social compact with society and a failure to deliver on the common good of public education. Poor student performance will also increase the cost of debt for many students and their families and

communities, both for those who rely on government loans to access domestic higher education and for those who make sacrifices to provide international education opportunities for their loved ones. As many contributions to this collection exhort, working in whole-of-institution partnerships with our students for better post-pandemic engagement and experience will be crucial as we reflect on and learn the lessons of these most stressful tests.

The book makes an important and timely contribution to global higher education. It engages 24 leading scholars from eight countries who have undertaken research on student retention, engagement and success. The case studies, success initiatives and research presented here, from across different institutions, contexts and systems, advance our understanding, theorising and practice and shine a light on what's possible for our sector's educational future—one that commits itself unreservedly to student retention and success for all.

September 2021

Mahsood Shah  
Sally Kift  
Liz Thomas

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## Notes on Contributors

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**Dawn Bennett** is Assistant Provost and Director of the Transformation CoLab with Bond University in Australia. She was previously John Curtin Distinguished Professor with Curtin University. Dawn is an expert on the development of graduate employability within higher education. A National Senior Australian Learning and Teaching Fellow and Principal HEA Fellow, Dawn is an Adjunct Professor with Griffith, Monash and Curtin Universities, Visiting Fellow with the University of the Arts, Helsinki, and Research Fellow with the Australian National Centre for Student Equity in Higher Education.

**Roisín Curran** is a principal fellow of the Higher Education Academy and has worked as a staff and educational developer at Ulster University since 2004, in the Centre for Higher Education Research and Practice (CHERP). She held the position of Interim Head of CHERP between April 2020 and July 2021 and is the current Course Director of the Master in Education (MEd) programme. Curran has also led a cross-disciplinary project team at Ulster as part of a national ‘What works? Student Retention and Success Change Programme (2013–16)’ involving 13 institutions across the UK. This collaborative action research has further extended our knowledge of what works in relation to improving student retention and success. She has a particular interest in *student engagement* and has published papers on the impact of a ‘students as partners’ approach on staff-student engagement. Curran has co-developed a new Integrated Curriculum Design Framework that scaffolds the student journey and which promotes a relational-based partnership approach, active learning, peer support, and ways of thinking and practising the discipline.

**Indira N. Z. Day** completed her doctoral dissertation about the characteristics, perceptions, and results of continuous assessment in higher education at the Leiden University Graduate School of Teaching in 2018, where she also worked as a researcher studying the use of peer feedback on video presentations. Subsequently, she worked as a senior researcher in the Higher Education Research and Innovation research group at Amsterdam University of Applied Sciences. She currently works as a post-doctoral researcher at Utrecht University where she studies the professional development of teachers in higher education and studies student well-being at University of Applied Sciences Leiden.

**Naomi Dempsey** is the Pro Vice-Chancellor (Students) at Victoria University, leading the enhancement of student learning and a contemporary student experience that goes beyond the formal learning experience and enables students to succeed on their terms. She has a wealth of experience in student retention and success strategies as well as student-centred design, gained from her success in both the public and private sectors that supports VU’s endeavours to innovate education for all.

**Richard Evans** is the Chief Executive of Birmingham City Students' Union (BCUSU) at Birmingham City University. His role is to lead the organisation and form strategies for the Students' Union, in partnership with student leaders. A key aspect of the role is developing and maintaining positive relationships with the university and other stakeholders. He has worked at various institutions for students' unions and has a professional interest in student advocacy, representation and voice. A current focus is utilising student insight, data and voice to improve the academic, social and service experience of students.

**Dennis Groth** is presently the acting Dean of the Luddy School of Informatics, Computer Science and Engineering at Indiana University. Prior to that and for the past 11 years he served as Indiana University's Vice Provost for Undergraduate Education. He is also professor in the School of Informatics, Computing and Engineering, where in the past he served as the associate dean for undergraduate programs. A past recipient of the Trustees Award for Teaching Excellence, Vice Provost Groth co-chaired a committee that created the report for the undergraduate student experience portion of the Campus Strategic Plan. He currently is involved in numerous local and national initiatives designed to create a data-informed culture at all levels of the university.

**Sally Kift** is a Principal Fellow of the Higher Education Academy (PFHEA), a Fellow of the Australian Academy of Law (FAAL) and elected President of the Australian Learning & Teaching Fellows (ALTF). From 2012 to 2017, she was Deputy Vice-Chancellor (Academic) at James Cook University (JCU). Prior to JCU, Sally was a Professor of Law at Queensland University of Technology (QUT), where she also served as Law Faculty Assistant Dean, Teaching & Learning (2001–2006) and QUT's foundational Director, First Year Experience (2006–2007). Sally is a national Teaching Award winner (2003) and national Program Award winner (2007). She was awarded a Senior Fellowship by the Australian Learning and Teaching Council (ALTC) in 2006 to investigate the first-year experience and is a Discipline Scholar in Law. In 2017, Sally was awarded an Australian Award for University Teaching Career Achievement Award for her contribution to Australian higher education.

**Küllli Kori** is working as a Postdoctoral Researcher at Tallinn University, School of Educational Sciences. She received her PhD in Educational Sciences at the University of Tartu in 2017. She also has a Master degree in Biology Didactics and Bachelor degree in Genetic Engineering from the University of Tartu. Her current research focuses on citizen science in education. Her other research interests include educational technology, STEM education, inquiry-based learning, and student retention.

**Sadhana Manik** is an associate professor in the School of Education at the University of KwaZulu-Natal (UKZN), South Africa. She is a recipient of ‘excellence in research’ (2019) and ‘excellence in teaching’ (2018) awards from UKZN. Her niche research interests are international migration of the highly skilled within education, xenophobia, intersectional studies (such as gender and race), student access, support and success in higher education institutions, sustainable living and textbook analysis. She is project leader at UKZN of two international student, staff and research exchange collaborations with Western Norway University of Applied Sciences (HVL), one with the University of Tampere, Finland and one with the Michigan State University, USA.

**Trish McCluskey** is the Director of Connected Learning at Victoria University, where she leads a talented team of learning designers to create innovative curriculum resources and support academic staff to develop contemporary learning and teaching practices. She was instrumental in the design and development of the VU Block Model, a radical reconceptualisation of the traditional university curriculum. Trish has a deep appreciation of the challenges facing non-traditional students as she was first in her family to attend university and did so as a young mother working full-time while living in a foreign country. Her research interest is the evolving Tertiary Education ecosystem.

**Luke Millard** is Dean of Teaching and Learning at Abertay University. Prior to that, he led educational development activities at Birmingham City University where the partnership with BCUSU and the focus on student engagement was developed. His research focuses on building student skills through student employment on campus and student transitions and the first-year experience.

**Sarah O’Shea** has spent over two decades teaching and researching in the higher education field. Professor Sarah O’Shea is regarded as an expert in educational equity. Her research (A\$3 million+) advances understanding about how under-represented student cohorts enact success within university, manage competing identities and negotiate aspirations for self and others. Sarah is currently leading an ARC Discovery Project exploring the persistence behaviours of first-in-family students and is affiliated with the National Centre for Student Equity in Higher Education at Curtin University, Perth.

**Margus Pedaste** is Professor of Educational Technology at the Institute of Education of the University of Tartu, where he is leading the Centre for Educational Technology. He is also Head of Pedagogicum, a consortium for coordinating teacher education at the University of Tartu. He received his PhD at the University of Tartu in 2006. He has been involved in many national and international research and development projects, such as SCY, Go-Lab, Next-Lab, Ark of Inquiry, EL-STEM and ViSuAL. His main research themes are educational technology, inquiry-based learning, technology-enhanced learning and instruction, digital competences, learning analytics and augmented reality. His main interest in all these themes lies in the context of STEM education. He is an active member of several professional associations, including EARLI, AERA and IEEE. Currently he is the Vice-Chair of IEEE Estonian section and Associate Editor of the EARLI journal *Educational Research Review*.

**Labby Ramrathan** is a Professor in the School of Education at the University of KwaZulu-Natal and a National Research Foundation (NRF) rated researcher with global recognition. He simultaneously serves as President of the South African Education Research Association (SAERA). He has been in leadership positions within the School in various capacities including Head of School, Acting Deputy Dean and Acting Dean. He has been involved in teacher education for more than 20 years spanning academic teaching, researching higher education, teacher development and curriculum studies. He has been involved in several institutional, national and international project works and has published widely in these areas of scholarship. He has been awarded several competitive research grants to research issues related to education. He has supervised

to completion more than 60 master degree and 25 PhD students. Currently he is leading the College of Humanities curriculum transformation process within the context of decolonisation.

**George Rehrey** is the founding director of Indiana University's Center for Learning Analytics and Student Success (CLASS). Before that he directed the award-winning Scholarship of Teaching and Learning Program at Indiana University's Bloomington campus. George serves on the advisory board for Taking Evidenced-based Action, a national coalition of campuses using learning analytics to improve student engagement and success. He is also a member of Hub Leadership Committee for the Bay View Alliance, an international coalition of universities from Canada and the US. In the Bay View Alliance, he also leads a Learning Analytics Research Collaborative (LARC). LARC is working towards understanding how learning analytics can be used to improve student success while creating a data-informed culture at both the departmental and institutional levels of large research universities.

**Nadira Saab** is a professor at ICLON (Graduate School of Teaching), Leiden University, the Netherlands. In addition, she is a strategic advisor at Kennisnet (a public organisation for education and ICT). Her research covers several topics, including technology-enhanced education, diversity and inclusiveness, motivation, formative assessment, professional development of teachers, and collaborative learning. She supervises several PhD students and participates in various national and international research projects. She is project leader of the 'Kenniswerkplaats Diversiteit' (Knowledge Lab Diversity) of which the aim is to construct knowledge about (cultural) diversity and inclusiveness. Saab is chair of the board of the special interest group Learning and Instruction of the VOR (Vereniging Onderwijs Research), the national organisation of Educational Research in the Netherlands, and she is a member of the board of the Catharine van Tussenbroek Fonds. Saab is a Fellow at the Leiden Teachers Academy, which is aimed at developing and sharing good practices of (higher) education with other teachers at Leiden University.

**Gayani Samarawickrema** is a Senior Lecturer teaching in VU's Post Graduate Certificate in Tertiary Education and researching in the area of scholarship of teaching and learning (SoTL). She draws on her experience in curriculum design, assessment and higher education practices in designing and developing assessments for the Block and reviewing units after its first year of offer in Block mode.

**Mahsood Shah** is a professor and Dean of Swinburne University of Technology, Sydney Campus. In this role, Mahsood provides overall leadership and management of the campus. Mahsood is responsible for the growth of the campus, development of new courses, staffing and resourcing, monitoring quality and standard, improving quality of student experience and other academic outcome measures. Industry and employer engagement and collaboration are also part of his role. Prior to joining Swinburne University of Technology, Mahsood led learning and teaching activities at several Australian universities. Mahsood is an active researcher. His areas of research include quality in higher education, measurement and enhancement of student experience, student retention and attrition, student engagement in quality assurance, international higher education, widening participation and private higher education.

**Linda Shepard** is the Senior Assistant Vice Provost for Undergraduate Education and Director of Bloomington Assessment and Research at Indiana University. She provides leadership for the campus in the development of institutional resources used to inform campus policy and strategic initiatives. She promotes the use of information for benchmarking and monitoring improvement. Dr. Shepard has served in various professional capacities, as a faculty member, in leadership roles at IU, and IR professional organisations both locally and nationally. For the Fellows program, Linda has been instrumental in navigating the landscape of compliance, developing methodologies for analyses and creating information sources to support faculty inquiry. Linda holds MS and PhD degrees from Indiana University in Educational Psychology with a minor in Psychology.

**Andrew Smallridge** is professor and Dean of Victoria University's First Year College and was responsible for the implementation of the Block



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**Cathy Stone** is an independent consultant and researcher in the field of post-secondary student equity, retention and success. She holds the positions of Conjoint Associate Professor in Social Work at the University of Newcastle, Australia, and Visiting Research Fellow with the National Centre for Student Equity in Higher Education (NCSEHE), Curtin University, Australia. As an active researcher, Cathy's publications focus particularly on the experiences of mature-age, first-in-family and online students. For many years Cathy held senior management roles in university student support services, working with both face-to-face and online student cohorts. In 2016, as an NCSEHE Equity Fellow, Cathy undertook a national research project into improving outcomes for online students, developing guidelines for institutions. Her work in this area continues.

**Liz Thomas** is professor of higher education at Edge Hill University, and has more than twenty years' experience undertaking and managing research about widening participation, student engagement, belonging, retention and success, and institutional approaches to improving the student experience and outcomes. Liz directed two phases of the What Works? Student Retention and Success programme; was part of the pan-European team examining student withdrawal, persistence and success in 36 countries; and has led research on the engagement of commuter students, and a whole-of-institution approach to widening participation. Liz is currently part of an Erasmus+ project #Ibelong: Towards a sense of belonging in an inclusive learning environment, piloting interventions to improve the belonging and success of first generation and ethnic minority students. Liz served as widening participation expert for the Teaching Excellence and Student Outcomes Framework main panel for three years, and is the author and editor of many books and articles.

**Nick Zepke** recently retired as Associate Professor of adult education in the Institute of Education at Massey University in New Zealand. He has

taught and still researches and publishes on three interrelated themes: learning-centred teaching with a special focus on the first-year experience in higher education, policy studies in higher education, and lifelong and life-wide education. He has published six books, more than 100 articles in international and New Zealand journals, and numerous commissioned reports on these themes. Since 2009 he has focused on student engagement in higher education. He has published a book, 21 articles, a major commissioned report and six book chapters on this subject, often in collaboration with Linda Leach. His most recent work focuses on the connection between politics and student engagement.

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# 1

## Student Retention and Success in Higher Education

Liz Thomas, Sally Kift, and Mahsood Shah

This chapter introduces the book, discussing the philosophy, the key themes addressed and the contribution of the individual chapters. Improving the retention and success of students in higher education has become a priority for governments, universities and colleges across the world; an economic and social imperative that has only intensified as the global impact of COVID-19 on lives and livelihoods exacerbates inequality. The cost of higher education, either to individuals, or states, or both, is high, and thus non-completion is frequently seen as inefficient. More significantly however, there can be huge personal sacrifices and losses involved for individuals, their families and communities in entering a

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higher education programme, and not achieving anticipated goals. The personal price includes the costs and foregone income, but also confidence and self-belief, and the dashing of future hopes and dreams. It should be noted however that formal definitions of success, such as continuation, completion and on-time graduation, may obfuscate personal success, such as self-worth, academic validation, new skills, alternative ways of understanding the world and lifelong friendships. There is clear evidence that even partial completion of a degree can, in some contexts, have real employment and career-related benefits for students that, for many, outweigh the costs of non-completion (Harvey et al., 2017; Norton et al., 2018). Employment-related benefits have been found to include: higher earnings; securing employment; learning useful skills; and clarifying career goals (Norton et al., 2018). Non-employment-related benefits can include making friends, learning things that are interesting and useful (Norton et al., 2018), civic engagement and health benefits.

The underlying philosophy of this book is that a more diverse student population requires higher education institutions to change to facilitate the success of all students. Success traditionally includes persisting with and completing academic programmes on time, but it can also be understood more broadly, encompassing personalised notions of success and outcomes both before and beyond graduation. Student success is achieved through active engagement in an inclusive learning community, which requires institutional transformation. The key concepts of diversity, success, engagement and institutional transformation are unpacked briefly below, and in more detail throughout the subsequent chapters.

The expansion and diversification of higher education is evident throughout the world; for example, the creation of the European Higher Education Area is underpinned by a commitment that the ‘student body entering and graduating from European higher education institutions should reflect the diversity of Europe’s populations’ (European Commission, 2018, p. 4). In Australia, the *Bradley Review of Australian Higher Education* (2008) called for large increases in the participation rates of under-represented groups and recommended specifically that an overall target of 40% of 25- to 34-year-old Australians have a university degree by 2020 and that 20% of higher education enrolments at the undergraduate level are people from low socio-economic status (LSES)

backgrounds, also by 2020.<sup>1</sup> The targeted focus on LSES students built on two decades of generally bipartisan government support for the student equity agenda, enhanced in the Australian context by the collection of longitudinal data focused on access, participation, success and retention that has informed policy and practice interventions.

Similar sentiments to the European Higher Education Area and the Bradley Review are seen in other countries and in the chapters in this book (e.g. South Africa and the United States). Definitions of diversity, and the construction of categories differ between countries (Thomas & Quinn, 2003), but there is a shared focus on representation and historically excluded groups. In England, the Office for Students has identified six target groups<sup>2</sup> that higher education institutions must consider in relation to access, continuation and completion, attainment and progression into further study or employment. Similarly in Australia, the 1990 student equity framework – *A Fair Chance for All* (Department of Education, Employment and Training (DEET), 1990) – also established six student equity groups, and led to the development of ‘system-wide performance measures... to monitor progress towards achieving equity objectives’ (DEET, 1990, p. 4).<sup>3</sup> In the Australian context, the need to update these longstanding designations is currently under review, to consider, for example, their expansion to include: other disadvantaged groups; broadening beyond the current foci limitations of domestic, undergraduate and public university; and consideration of compounded and multidimensional disadvantage (Harvey et al., 2016).

Success is a term that has emerged from the debate about different nomenclature; indeed early international research on the topic identified around twenty terms used to describe student success and its antithesis (Thomas & Quinn, 2003, p. 22). Furthermore, similar terms can have different meanings resulting in ambiguity (e.g. Hagedorn, 2004, in

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<sup>1</sup> The government response to Bradley pushed the 40% target out to 2025.

<sup>2</sup> The six target groups are: students from Index of Multiple Deprivation (IMD) quintiles 1 and 2; students from POLAR 4 quintiles 1 and 2; Black, Asian and Minority Ethnic students; Mature students; disabled students; and care leavers.

<sup>3</sup> The six identified equity groups are: people from low socioeconomic backgrounds; Indigenous Australians; people from regional and remote areas; people with disabilities; people from non-English speaking backgrounds; and women in non-traditional areas (Department of Education, Employment and Training, 1990).



relation to retention) and adding to the complexity in relation to comparative analysis between countries (Thomas & Hovdhaugen, 2014), or, in some cases, even institutions. Some definitions refer to students who leave higher education before completion of their target award, but various terms are used to describe and differentiate those who leave and do not return, those who take some time out and return, those who transfer qualification, course or institution, and so forth. Some terms focus on the process, so continuation from one unit of study to another, and some make reference to the time taken, or the qualification level or grade achieved. Different terms are used in the chapters in this book, reflecting the national and institutional contexts, and ideological positions, of the authors. Where possible the editors have used the more generic phrase ‘student success’, unless referring to a specific aspect of this umbrella term.

Underpinning much of the debate around nomenclature have been metric-based definitions. The Australian Government, for example, has collected a comprehensive set of statistics, referred to as the *Higher Education Statistics Collection in Australia*, for many years. Since 2003, the higher education student data collection has been conducted under the *Higher Education Support Act 2003*. Currently, the government department publishes time series data on four measures of academic progress: attrition (the proportion of commencing [domestic bachelor] students who neither complete nor return in the next year), retention (the proportion of commencing students who do return the following year), success (the proportion of subjects passed each year as a percentage of all subjects attempted) and completion (the proportion of students who completed a course in any year across the given time period). More recently, ‘adjusted attrition’ and ‘adjusted retention’ rates are also published, to take into account students who change course or institution, but do not leave higher education altogether. When considering the introduction of performance-based funding measures in Australia in 2019, the Expert Panel in its report to the Minister stated that ‘attrition and completion rates offer measures of student success’ (Wellings et al., 2019, p. 50). Similarly, in 2013, the Higher Education Funding Council for England (HEFCE, 2013) identified four outcomes of higher education, and from this has emerged a set of measures that are now fairly widely used in that context: continuation (those who progress between their years and levels

of study); completion (achieving the chosen exit qualification); attainment (e.g. differentiating between higher and lower degree classifications); and progression (continuing to employment or further study, which can be differentiated into graduate employment and higher level study, as opposed to any employment and similar or lower level study).

However, there are wider benefits of learning and higher education; for example, those related to health, social cohesion, tolerance, civic engagement and inter-generational mobility (Brennan et al., 2013). Feinstein et al. (2008) state that graduates are the least likely to commit crimes, utilise a range of social networks, and are the healthiest and longest-living members of society; graduates are less likely to smoke, be obese or suffer from depression compared to other adults (p. 18). These and other personal dimensions of success are not the primary focus of this collection, but further dimensions of success are discussed in the chapter by O'Shea (see Chap. 2) in this book.

Research on student success in the US, and more recently in the UK, Australia and Europe, has explicitly linked student engagement to student success (see Chap. 4 on engagement in this volume for specific examples). The complex concept of student engagement, however, is poorly defined and operationalised; for example, research in England found that there was not even a shared definition within institutions (Thomas, 2017). In Australia, the *Higher Education Standards Framework* (2015), against which all higher education providers are regulated, does not refer to the notion of 'student engagement' at all (though success is mentioned four times and retention once).<sup>4</sup> Academic engagement is the most usual focus of interest in relation to student retention and success, enhanced by its association with social engagement and a sense of belonging, although other sites of engagement include extracurricular enrichment activities and institutional governance (Trowler, 2010). Coates (2007, p. 122) describes academic engagement as 'a broad construct

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<sup>4</sup>See Higher Education Standards Framework (2015): 'successful transition' in Standard 1.3.1 and 1.3.6; 'equivalent opportunities for academic success regardless of students' backgrounds' in Standard 2.2.1; 'regular external referencing of the success of student cohorts against comparable courses of study' in Standard 5.3.4; and 'use of data on student progress and success' in Standard 5.3.7. Retention is referred to in Standard 1.3.5: 'Trends in rates of retention, progression and completion of student cohorts through courses of study are monitored to enable review and improvement.'

intended to encompass salient academic as well as certain non-academic aspects of the student experience', comprising: active and collaborative learning; participation in challenging academic activities; formative communication with academic staff; involvement in enriching educational experiences; and feeling legitimated and supported by university learning communities. Research in England and the UK has demonstrated that students from non-traditional groups, including those who travel to study, have lower rates of engagement in academic learning (Thomas et al., 2017), the wider student experience (Thomas, 2019) and society (Zepke in this volume), which explain lower rates of success (Social Market Foundation, 2017). As Zepke draws out in his chapter in this book, while engagement as a construct is and should continue to be critiqued, the evidence of four international case studies – those of belonging and co-production (e.g. Thomas, 2012), an engaging curriculum (e.g. Kift, 2015), purposeful activity (e.g. Kuh et al., 2006) and active citizenship (e.g. Zepke, 2017) – shows that engagement is key to retaining students and their learning success.

The fundamental value that differentiates this book from other research on the topic of student retention and success is the strongly held, and research-informed, conviction that institutions should change, sometimes radically, to facilitate the engagement and success of students in their learning and more widely. There are different types of institutional response to widening participation and student diversity (Jones & Thomas, 2005). The 'academic' approach seeks to attract already suitably qualified students from target groups, and makes no institutional changes. The 'utilitarian' approach recruits students who do not necessarily have traditional or high-level educational qualifications, and who may not share the cultural capital of the majority of students and staff, but this approach 'plugs' any 'gaps' with bolted on interventions. The academic and utilitarian approaches can be contrasted with the 'transformative' approach, which emphasises changing the institution, recognising the benefits or strengths that come from a more diverse institution (Shaw et al., 2007). This requires wide-ranging changes, but particularly to the curriculum organisation, contents, delivery and assessment. Kift's Transition Pedagogy (2009, 2015) emphasises the importance of whole-of-institution approaches, enabled by academic and professional staff and

students working in partnership, to deliver coordinated, comprehensive and integrated engagement via the disciplinary curriculum, in which embedded, contextualised support and a sense of belonging are located and accessible by all students. Focusing specifically on effective teaching and support for LSES student success, a national project in Australia argued that, ‘Rather than being the primary responsibility of solely the student or the institution to change to ensure LSES student success, ... adjustments would be most usefully conceptualised as a “joint venture” toward bridging sociocultural incongruity’ (Devlin et al., 2012, p. 7). The ideas of institutional transformation are discussed further in Chap. 3, and more practically in other chapters.

Recurring themes in the book, which reflect the philosophical position of the editors and authors and which are discussed within and across the chapters are:

1. Shared responsibility for student success and developing the capability of staff, students and institutions.
2. A whole institution approach based on transformation and an asset- (or strengths-) based approach to student diversity.
3. Leadership for student success at all levels throughout higher education providers.
4. Partnerships between staff and students facilitating collaboration, staff engagement and student involvement in the process of change.
5. Inclusive curriculum, learning, teaching, assessment and delivery that is relevant, accessible and engaging for all students.
6. The use of evidence and criticality to inform institutional change, including the role of student performance data, learning analytics and student voice.

Chapter 2 focuses on defining success and seeks to challenge the dominant discourse that measures student retention and success in numerical terms. Drawing on qualitative research with 70 students, the chapter demonstrates that students do want to be successful in terms of achieving their academic qualifications, but they also have more nuanced interpretations about what success means to them, informed and shaped by their personal circumstances. Furthermore, the dominant policy discourse that

positions the student as responsible for their success – or otherwise – is questioned and institutions are encouraged to embrace a more collaborative approach to improving the success of all students, ideally which is informed by wider notions of success, for example based on a capabilities model. While the research has been undertaken in Australia, the issues of definition and the need to challenge more restrictive ways of understanding success, and who is responsible, are universal themes across higher education.

Chapter 3 picks up and expands upon the idea of institutional responsibility for students' retention and success through institutional transformation. It recognises that, as the work of institutions matures, the approach becomes more transformational, as institutions adjust their learning, teaching, assessment, mode of delivery and curriculum contents – and wider student experience – to align with the realities of contemporary twenty-first century students. Furthermore, student diversity can be viewed from a strengths-based approach (harking back to notions of capability as referred to in Chap. 2), and thus adaptation and transformation have a positive impact on the institution, including its culture and structure.

Chapter 4 adds to the conceptual framing of this book, taking a closer look at the research about student engagement, and its contribution to retention and success. By examining four international research studies about student engagement and success, and a wealth of smaller studies, the evidence strongly points to the contribution of engagement to success. Engagement, however, is conceptualised and operationalised differently in the studies, and the research methodologies differ, giving differential weight to psychological, sociological and ecological interpretations, and focusing on the individual, institutional or societal levels. Despite these variations, a broadly uniform message proclaims the value of engagement. There is, however, a risk that the concept is captured by the neoliberal discourse of national governments and quality assurance systems, which seek to measure student success, resulting in homogenisation and even standardisation of student engagement. Thus, as we strive to improve the engagement and success of our students, including those from equity groups and diverse backgrounds, we must be mindful of the

risks of standardisation, and strive to retain criticality to harness the power of engagement reflexively.

Chapter 5 takes a closer look at the use of data and evidence to inform the work of academic staff to improve student success. At Indiana University, colleagues have created a process to bring about transformation to the culture of the institution, with the intention to become more data-informed through a programme of Learning Analytics Fellows. Each year academic staff from any rank and discipline across the university are recruited to be Fellows – discipline experts who will investigate aspects of student success in their courses, drawing on a range of institutional data sets. The Fellows model takes a scaffolded approach, through which support is provided by the Centre for Learning Analytics and Student Success (CLASS) to develop awareness about what the learning analytics are telling them about their students, understanding why this happened, considering actions that can be taken to address issues, undertaking further analysis to explore how successful the changes have been, and reflecting on new awareness and identifying issues for investigation. CLASS provides leadership, financial support for the research and ensures faculty projects align with campus interests and the strategic plan. The Bloomington Assessment and Research (BAR) office supports these projects by developing datasets and visualizations that inspire faculty interest, and provides data sets and data expertise for each project. The programme commenced in 2016, and 56 academic staff from 25 different programmes have conducted 66 research projects during this time. Survey data suggests that the scheme is indeed impacting on the institutional culture as colleagues are engaging with and using institutional data to make changes to the curriculum and pedagogy of their programmes of study.

Chapter 6 continues the exploration of a whole institution approach to widening access and improving student success through a case study of the University of KwaZulu Natal, in South Africa, where institutional transformation is enshrined in legislation. The University Learning and Teaching Office is leading much of this work, but central to this was the recognition that the institution needs to change, and not just the students. The work across the institution includes: transforming the curriculum, particularly through decolonisation informed by African rather

than European scholarship; developing the evidence-base about student retention and success in the South African context; and reviewing and developing institutional policies and procedures that impact on learning and teaching. Students are supported through enhanced monitoring and support. This transformation is underpinned by institutional commitment demonstrated through the leadership at all levels, and a collaborative partnership with students to bring about changes.

Chapter 7 provides another case study on institutional transformation to improve the success of all students, at Ulster University in the UK. Here institutional research finds that four areas of change are required: pre-entry contact, mainstreaming pastoral care, active learning within the discipline and peer support in learning. These changes are implemented through partnerships between staff and students. This chapter identifies the approaches that facilitated and enabled staff engagement in the process of change, even if initially there was some resistance. The effective approach to engage staff included: an explicit institutional commitment through the strategy; professional development, recognition and reward for staff; opportunities to collaborate and share ideas with staff and students; funding support; and the use of evidence and reflection through learning communities.

Chapter 8 continues the theme of working in partnerships with students to bring about institutional transformation. Birmingham City University in the UK has a formal partnership between the institution and the Students' Union, which has developed over a twelve-year period. During this time, colleagues have worked together on a retention and success initiative that resulted in a 7% improvement in continuation in one of the participating schools, and numerous improvements in the student experience, as reflected in data from the National Student Survey which assesses students' satisfaction with their higher education experience. Through this partnership model of working, the university and Students' Union have shifted the institutional paradigm away from aiming to attract 'university ready students' (the academic approach) to one where the university is reflexive and undergoes change to ensure that it knows who its students are and is 'ready for the students' recruited to facilitate them to be successful (more of a transformative approach).

Chapter 9 draws on Australian and international research about online learning, which is attractive to many non-traditional learners and thus a valuable approach to promoting equity; however, the significantly lower rates of continuation and completion undermine the goal of equality of outcomes. Drawing on student and staff voices from a range of studies, the chapter argues for and presents greater understanding of the constitution of the online student community, and makes evidence-informed recommendations about the ways in which online higher education can improve the engagement, belonging, retention and success of learners. In particular, this includes: building online students' sense of belonging and being valued by the institution, rather than feeling like an appendage; proactive communication between the institution and students; the recognition and provision of sufficient staff time to facilitate high quality online teaching; good quality design that provides communication, connection, engagement, interaction and collaboration; development of students' expectations and capacity to learn being embedded into the core curriculum; the provision of academic and pastoral support when it is needed and not just during 'office hours'; and genuine flexibility, allowing students both to work ahead and catch-up in ways that accommodate their complex lives. The lessons from this chapter have particular application as institutions move their learning and teaching delivery online in response to COVID-19 disruption.

Chapter 10 turns its attention to the role of the institution in developing students' employability through the curriculum to ensure that career development learning reaches all students, including those from equity groups. Employability is defined as 'the ability to find, create and sustain meaningful work across the career lifespan and in multiple settings'. The employability tool has been developed at Curtin University in Australia and embedded into a number of core or foundation subjects that are common to first year students in particular discipline areas. At the heart of this work is collaboration between academics, careers professionals and students, promoting co-delivery and greater recognition of the support available from careers staff and inclusion and embedding the employability work into the core curriculum without generating additional work. In addition, students' participation in the process generated research data (consent given by over 99% of students) and this was used to improve the



learning experience, learn about the process and collect trend data over time.

Chapter 11 considers how assessment can be used to improve student engagement and attainment. Summative assessment *of* learning can be contrasted with formative assessment *for* learning. In the latter, the emphasis is on increasing time on task through frequent assessments, and using feed-forward and feedback to provide students with insight and understanding to improve future assessed work. The chapter focuses particularly on the role of peer-review, which develops students' understanding of the marking rubric through the process of being a reviewer, and arguably also provides useful feedback. Three case studies from the University of Leiden, in the Netherlands, demonstrate how assessment good practice can be integrated into the curriculum process.

Chapter 12 develops our understanding of institutional transformation further by focusing on radical curriculum change across Victoria University, Australia, which has a non-traditional and very diverse student population. Learning has been re-organised into sequential blocks in each semester, rather than concurrent subjects. This has been accompanied by a move towards more active, student-centred and inclusive learning pedagogies, which value the diverse knowledges of students. More specifically, lectures have been replaced with workshops, offering smaller class sizes and opportunities to engage directly with authentic and relevant learning, and student capacity is developed and their learning scaffolded through embedded skills development. A greater diversity of assessment is used, which relates to professional identities and a very quick turnaround of feedback helps students to engage with this learning and improve progressively as they continue their journey. Over the past two years student engagement and success has improved, as measured by continuation from one semester to the next, pass rates and grades, with disproportionately greater improvements for students from specific equity groups.

Chapter 13 provides an example of how research can be used to inform understanding about success issues, and make improvements to practice. The chapter focuses on the retention and completion of students studying professional education programmes, in particular IT courses, in Estonia. In Estonia, IT students face stiff competition for higher

education places, and begin their courses with much enthusiasm for the subject. But despite this, rates of graduation are lower than the rates of withdrawal. Various research projects led by the authors point to the need for greater professional integration to improve retention and completion, and this requires re-thinking the curriculum for subjects such as IT, to ensure greater alignment and relevance to students' professional goals and experiences, which the authors suggest could be achieved through work-based learning. Greater professional integration, it is argued, leads to increased academic integration as students address real-world employment-related problems within their academic study (which we assume is because more authentic learning increases motivation), and their social integration increases as they interact more, and more meaningfully, with colleagues in the workplace and in wider professional circles. There is, however, a counter risk that too much professional integration can reduce graduation rates, for example, due to workload, or simply abandoning their university programme to take up full-time employment. A collaborative approach is therefore needed involving higher education providers, IT companies and students in creating a higher education programme that achieves academic, social and professional integration, and enables both successful completion of a relevant academic programme and a contribution to the workplace. There is much work to do to convert these studies into institutional and professional changes, but it is important to take into account specific discipline contexts when seeking to improve student retention and success.

This book offers a rich and varied selection of research and evidence-informed practice that help to demonstrate how the editors' and authors' philosophy can be translated into action within institutional contexts in different national settings. We are very grateful to the authors for sharing their knowledge and experiences with us, and we hope you enjoy reading and using the book.

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# 2

## Why Does Student Retention and Success Matter?

Sarah O'Shea

### Introduction

When the terms 'success' and 'retention' are considered in relation to the higher education (HE) sector, numerical references are often the most common measurement used to indicate whether universities are meeting expected goals and objectives. However, for those who are embedded within the sector, whether as students, academics or support staff, there is an implicit understanding that student success and retention needs to be considered beyond just statistics (O'Shea & Delahunty, 2018). Indeed, such numerical or statistical framings need to be disrupted to enable alternative but equally valid perspectives to be foregrounded in discourse and policy. This is particularly key in a HE environment that is committed to attracting a greater diversity of students from all walks of life, as

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many of these cohorts arrive with different expectations and goals related to their educational pursuits.

Globally, we are in an era of increased participation within the university sector. Almost a third of the school leaver age cohort worldwide now attend university and, more broadly, all high-income countries and most middle-income countries are approaching or exceeding 50% participation across the population as a whole (Marginson, 2016). While such high levels of access appear to reflect more equitable and universal educational outcomes, deeper analysis of how university participation is experienced across all student populations reveals that not all learners are treated equally within the system, an inequality that continues to be both deeply embedded and somewhat invisible (Reay, 2016; Southgate et al., 2018; Wainwright & Watts, 2019). Within an Australian context, this inequity is particularly pertinent with the imminent introduction of a sector-wide university funding regime linked to performance in four key areas. These foci of measurement are all underpinned by a need to retain students throughout the degree and include (1) graduate employment outcomes, (2) student success, (3) student experience, and (4) participation of Indigenous, low socio-economic status, and regional and remote students. Commencing in 2020, a total of \$80 million will be tied to these measures and this will grow over the following years to a cap of 7.5% of the University Commonwealth Grant Scheme (Wellings et al., 2019).

Attaching student retention and success to monetary rewards can arguably result in detriment to both student and institution, both of whom may be under pressure to sustain retention at all costs. Equally any academic performance indicators that are only outcomes focused (graduation, employment, retention) should be contextualised according to student cohorts and also university locations. Such contextualisation is needed to account for discrepancies in material, personal and educational resources and so avoid inequity or disadvantage (Harvey, 2017). This type of funding arrangement also increases the need to deeply consider the nature of retention and success particularly the, often, implicit agendas driving such understanding.

In considering student retention and success, this chapter begins by providing a brief overview of access and participation within the HE

sector both internationally and within Australia specifically. Against this context, both terms are critically unpacked in relation to wider theoretical, political and social discourses. These perspectives are then contrasted with more embodied and individualised versions of retention and success, drawing on research that details the reflections and narratives of students themselves. Foregrounding alternative but equally valuable perspectives of pursuing university qualifications evidences the need to consider the needs and desires of our increasingly diverse student populations in different and, perhaps, more productive ways. The chapter ends by considering how these alternatives might be practically reconceptualised within HE discourse and practices.

## Higher Education Access: The Widening Participation Paradigm

The boom in the numbers of students accessing HE is tied explicitly to political and economic objectives, with the drive to increase participation emerging as a key policy driver across universities in most developed countries (David, 2012; Harwood et al., 2017; OECD, 2018). The term ‘widening participation’ was introduced in the late nineties and was included as a central tenet within the UK’s Further Education Funding Council report entitled *Learning Works: Widening Participation in Further Education*, also known as the Kennedy Report (1997). This report described the need to ‘widen participation’ as being ‘irresistible’ calling for a ‘dramatic shift in policy’ in order ‘to create a self-perpetuating learning society’ (Kennedy, 1997, p. 15). Such early calls were not limited to the UK; equally across OECD members the need to increase access to HE and improve participation rates for under-represented student populations was also prioritised (OECD, 2001).

Historically, widening participation has largely been translated in terms of numerical targets; for example, in the UK an initial goal of 50% participation of all 18 to 30-year-olds in HE by 2010 was established. Australia introduced participation goals in 2009 and these remain current including a target of 40% of all 25 to 34-year-olds having a bachelor



level qualification or above by 2025 and increasing the numbers of students from low SES backgrounds attending university to 20% by 2020. Perhaps as a result of such objectives, references to the term 'widening participation' abound in both political and educational rhetoric; particularly as these relate to student retention and success. However, as our student populations have diversified, so too have arguments about whether this is a positive or negative development. Increased access has attracted mixed responses. For some, such mass growth signifies the demise of quality education, a possible 'dumbing down' of the curriculum (Shervington, 2017; University Business, 2019) resulting in under-qualified professionals in the field (Foster, 2015). On the flip side of this, a more celebratory or positive perspective is touted, where attending university is associated with 'opportunity' and 'transformation' such as gaining a more stable job, having access to a higher income and in some cases breaking a cycle of intergenerational poverty (Cassells et al., 2012).

While inexorably tied up with political and human capital agendas and rhetoric, the concept of widening participation also perpetuates a certain view of educational retention and success. The next section considers how retention is considered and negotiated both broadly and also with specific reference to the Australian context.

## **Considering Student Retention Within a Widening Participation Discourse**

### **Background**

The term retention, whilst commonly used within the university setting, can be perplexing in terms of both definition and significance. At the most fundamental level, retention is considered in terms of the numbers of students who complete their studies but the complexities of this journey and its oft interrupted nature continue to defy exact quantification. Similarly, the reasons why some students continue to participate and others do not remains somewhat unfathomable and can include behaviours as diverse as students attending but not participating, those who

participate but do not attain the expected standards as well as ‘ghost students’ who enroll but never actually attend (Stephenson, 2019). There are many different models that seek to explore and ‘name’ the factors impacting on retention, persistence and success with conclusions invariably identifying a diversity of psychological, institutional and social considerations (Kahu & Nelson, 2018; Yorke & Longden, 2004).

Historically, the study of student retention has been entrenched within ‘a specific discourse and a specific theoretical framework, both of which are open to challenge’ (Tresman, 2002, para 4). Theoretically, interactionist thinking on student retention was fundamental to early understandings of this phenomenon, an approach that explored the ways in which student and institutional environment interact or the ‘sociology of retention’ (Bean & Bogdan-Eaton, 2001–2002, p. 74). Spady (1970) is recognised as being the first to conceptualise the university setting as a social system manifesting unique moral and social configurations. Put simply, Spady’s (1970) theory referred to Durkheim’s suicide theory (1897), arguing that certain forms of integration which help to reduce suicide, may be similarly applied to retention. This approach was longitudinal and identified particular variables that aid social integration and thus, increase the chances of persistence. However, simply achieving social integration within the university setting was later recognised as not sufficient to guarantee retention, with Tinto (1975) further developing this model to include reference to individual characteristics such as social status, educational background, motivational attributes and individual expectations. Tinto’s model, known as the ‘Interactionist Theory of Student Departure’, has been referred to as the ‘lynchpin’ of research about retention and student success (Bers & Nyden, 2000) and his model continues to be refined and built upon (see for example: Braxton et al., 2000; Kerby, 2015; Longwell-Grice & Longwell-Grice, 2008).

Despite widespread application and further development by Tinto (1987, 1993), Tinto’s model has also attracted critical attention, particularly as the university sector has grown in size and diversity (Manyanga et al., 2017). Horstmanshof and Zimitat (2003) identify how factors external to the students are not adequately addressed in these early models, suggesting that while this interactionist framing recognises that individual students may have histories that influence decisions to depart,

the model neglects the implicit role played by external factors in these actions. These factors not only include institutional policy and structure but also broader social and political issues related to material constraints and social stratification (Reay, 2016). The next section further explores the complexity of student retention and positions this, not as an individual act or decision, but rather as something impacted by a range of social and political influences.

## The Complexities of Student Retention

The journey that each student takes through university differs fundamentally and for those who choose to leave, the reasoning behind this decision is as unique as the students themselves. For students from equity groups,<sup>1</sup> particularly those who are intersected by a diversity of equity categorisations, the range and type of issues impacting on university retention are manifold, including (but not limited to) financial or geographic considerations (Corbett, 2016; Gore et al., 2015); lower levels of academic preparedness (Affawi et al., 2019); caring responsibilities (O'Shea, 2014); and of course limited sense of belonging or entitlement (Bathmaker et al., 2013). Yet despite the importance of recognising the complex circumstances many of HE learners contend with, institutions largely continue to treat students in a decontextualised sense with limited regard for the specific obstacles or concerns that impact on their educational journeys (O'Shea, 2016a).

By individualising the act of attending university, this activity becomes a lonely undertaking that is dependent on the activities of the individual rather than a collective endeavour. Such individualisation has been regarded as an essentially masculinist discourse characterised by forward uninterrupted movement through the HE space, the ideal of the 'turbo student' (Von Prummer, 2000) that assumes a student career in terms of

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<sup>1</sup> There are six identified equity groups in Australia which include students from low socioeconomic status (low SES); students with disability; students from Aboriginal or Torres Strait Islander backgrounds; Women in Non-Traditional Areas (WINTA); regional and remote students and non-English speaking background (NESB) students, also referred to as 'Culturally and Linguistically Diverse' (CALD) students.

an independent learner with few responsibilities and largely studying full-time. This is a mythic creation, the contemporary university student is a complex amalgamation of people at various stages of life, of multiple ages and of course varying degrees of responsibilities external to the campus environment. Yet politically loaded concepts such as social mobility and widening participation, whether intentionally or not, continue to position the student as being largely responsible for their own achievement and academic success. Whilst not wishing to undermine the construct of being an ‘independent’ and self-directed learner, it is important to recognise that those from more diverse backgrounds may not have acquired the necessary capitals that underpin success and achievement in this educational domain. This does not assume that such participants are in a position of lack, but rather than the capitals (cultural, symbolic or material) held may be in a different ‘currency’, not necessarily valued by HE institutions (Reay et al., 2001, p. 870). For those learners who arrive at university with alternative forms of cultural or knowledge capital, adapting to often invisible or taken for granted learning expectations can result in difficult and fragmented transitions into HE landscapes. Such fragmentation often translates into interrupted educational trajectories within the HE environment (O’Shea, 2016b). This individualised system of HE makes the translation of existing capitals into those expected and required within university a very fraught process; for many learners this translation may require shedding previous beliefs and identities, crossing into new spaces and places with little assistance or support (Bathmaker et al., 2013).

If retention rates continue to be perceived as performance indicators then the emphasis will remain on the retention of students until completion rather than recognising the complex and non-linear nature of this university career. As Tight (2019) succinctly explains:

there is the, increasingly heard, neo-liberal critique that student retention has predominantly financial drivers. In other words, it is not so much about doing what is best for the student, but about ensuring that the institution receives the highest number and proportion of student fees possible. (p. 7)

For this reason, research needs to consider the unique nature of retention to better understand this behaviour at a unique lived level rather than explore this in terms of universality or across student populations. The next section will explore the notion of success and consider how this has been translated within discourses and the factors underpinning and informing such understandings.

## Negotiating Success and Its Dominant Framings

### Background

Academic success, like retention, is a complex term with definitions that vary according to educational environments and also, student populations. Sullivan (2008), for example, exhorts institutions to identify different definitions of what 'success' is rather than apply criteria that do not recognise the realities of all learners. Theoretically, there are a myriad of framings that have been applied to understandings of success, these include psychological theories such as behaviourism that regard being 'successful' as premised upon actions that engender positive outcomes, an increase in these actions then resulting in achieving additional success. Such sentiments underpin Glasser's choice theory (1996) which regards the pursuit of success as reliant on perceptions of how an experience will, in turn, lead to positive outcomes. Desired success factors, though, are often unusual or unique, for example Arnold (1995) in her longitudinal study of high school students reports that from this cohort, success was ultimately defined in terms of achieving a desired future self that is aligned with an individuals' expectations of this self.

Within the Australian HE sector, official reports of academic success are based upon the relative acquisition of 'volume of knowledge', in this case the completion of subjects (units of study) by students (HESP, 2017). Using this measure, it is clear that national success rates have declined since 2004, from a peak of 86.85% in 2004 to 83.72% in 2015 (HESP, 2017). These success measures are further differentiated by the

background and contexts of students, with those attending part-time, those who are older or having lower levels of academic preparation reported as being less likely to attain institutional measures of success and also, more likely to depart university prior to degree completion (HESP, 2017, p. 6).

Yet such measurements do not provide adequate insights into how it is that students themselves perceive their levels of success. In fact, there is a dearth of research that focuses on the qualitative understandings of success as defined by individual learners. Yazedjian et al. (2008) have conducted one of the few studies that has approached learners to qualitatively reflect upon their understandings and reflections on academic success. While this study focused on ‘high achieving’ students, understandings of ‘success’ for this cohort often disrupted the assumption that success was simply equated to high marks or graduation. Overall, perceptions of academic success were ‘multifaceted’, with some participants defining grades as simply something to get through in order to pass a subject whilst others measuring their personal ‘self-worth’ through grade acquisition (Yazedjian et al., 2008, p.145). These authors also identify differentials in what constituted a ‘good’ grade with great variance even across a relatively stable sample of students. In most cases, being successful was a highly personal endeavor involving measures of social integration, independence and also control over the educational environment.

When considering conceptions of success, it is equally important to explore how students perceive or react to the concept of failure. One recent Australian study (Affawi et al., 2019) recruited 186 undergraduates who had failed at least one subject in their degree to investigate not only the issues that had led to this result but importantly, how the students themselves reflected upon this ‘failure’ and the ways in which this outcome contributed to their decisions to depart or persist. The study found that failure was often multifaceted and resulting from a plethora of factors that reflected ‘dispositional, situational and institutional’ circumstances (p. 6). Importantly, the act of failing also had a ‘compounding’ effect on existing obstacles and ‘stressors’ that these learners were already encountering during their university journey (p. 8), exacerbating already difficult and complex situations. Often this experience of failure was internalised by the students prompting a cycle of self-blame and, in some

cases, leading to thoughts of departure (Affawi et al., 2019). In this way, the act of failing was individualised with students either being 'blamed' or engaging in 'self-blame' for not having the necessary academic skills to achieve expectations. Such an implicit deficit discourse undoubtedly further isolating or stigmatising learners who may already have a limited sense of belonging within the institution; as Affawi et al. (2019) explain:

Such negative individualistic rhetoric serves to further marginalise students who may be struggling and may have a negative influence on their motivation and self-efficacy, and therefore on their persisting. (Affawi et al., 2019, p. 3)

As the previous sections have indicated, the terms 'retention' and 'success' are both complex and loaded; definitions and implicit assumptions around these terms abound, with these also impacting on how students perceive themselves as well as their positionality within the institution. Both concepts are also negotiated in terms of individualisation where students are held solely responsible for their success and retention within the HE system. Equally, such individualisation also serves to decontextualise the learner with little recognition of the personal desires or subjectivities of individuals. In order to contribute to understandings of the nuances of this situation, the next section details a recent research project that explored how final year students reflected upon success and the act of persistence. This will be followed by discussions and conclusions drawn from both the data and relevant literature in the field.

## **Success and Retention: What Do the Students Say?**

### **Background**

The next section details the summary findings from a three-year ARC project entitled: *Higher education participation and success: Investigating the persistence strategies of students who are the first in their family to attend university* (DP170100705). The project examined how students

themselves reflected upon persistence at university and their understanding of 'success' including how the enactment of success impacted on the self and those around them.

## Research Context and Design

In 2017–2018, a total of 331 students across nine universities, located in both urban and regional settings, agreed to participate in either an interview or survey. All participants identified as being first in their families to attend university and were also in the latter stages of their undergraduate degree. Each was also invited to nominate additional biographical and demographic details that applied to them, revealing the intersectionality of this particular cohort (Detailed in Table 2.1). The study is, however, gender biased with only 18% of the total participants identifying as male and so responses and findings are not necessarily representative of both genders.

Both the interview and survey guiding questions were the same, although the semi-structured interview format enabled some aspects of the experience to be explored in more depth. Even so, the qualitative data in the survey responses was rich, even if not of similar depth. Both interviews and surveys began with eliciting demographic information, followed by questions around three broad areas: self-reflections as a student; reflections on higher education; higher education participation and support from family/community, the institution and others. All the data was imported into NVivo12 and initially line-by-line coding was conducted on each of the interviews and the survey responses. Line-by-line coding was deliberately chosen to ensure that any themes emerged inductively from the data.

Constructivist grounded theory (Charmaz, 2006) was adopted in order to focus on the 'phenomena' being studied; this perspective emphasises the interpretative nature of theory generation emphasising researcher engagement with the data as well as the ways in which this is being contextually bounded by temporal, geographical, cultural and situational contexts (Addison, 1999; Charmaz, 2006). Moving between the themes that emerged from the data and also the literature in the field, combined



**Table 2.1** Identifiers nominated by students in the Australian study (students could identify more than one category)

Demographic information	Surveys	Interviews <sup>^*</sup>
Female	239	52
Male	50	18
Other or skipped	17	0
<i>Note: More than one of the categories below could be selected</i>	13	1
Aboriginal or Torres Strait Islander		
Disability	15	14
LSES	83	28
Rural/isolated	93	22
NESB	20	6
Refugee	4	1
Other (see further details below) <sup>a</sup>	125	29
Participants with children	69	32
Partnered	143	36
Single	146	19

<sup>a</sup>Comments in 'other' often included more information about the category/ies selected or indicated uncertainty about a category, such as being from Aboriginal or Torres Strait Islander backgrounds but not identifying as such. Categorising one's situation as LSES was sometimes difficult such as 'I wouldn't say low-socioeconomic background but we definitely by no means rich' (Survey), or 'My parents were [LSES] but I'm not now' (interview). Often 'other' was used to describe situations in more detail such as being or coming from a single-parent family, divorced family or dysfunctional family, having to leave home to study, leaving home at an early age, being mature aged, being homeschooled, having mental health issues; returning to study after having a child, leaving prison; born or parents born elsewhere. Participants who identified as homosexual or LBGQTI indicated this, as did others their religion, such as Muslim

with reflective memoing, avoided imposing preconceived 'analytic frames' to analysis (Charmaz, 2006, p. 62).

The following section focuses on the overarching themes that emerged in relation to two related questions, namely:

- What is your definition of success?
- How would you define a 'successful' student?

These are summary findings only with more in-depth exploration featured in recent publications (Delahunty & O'Shea, 2019, 2021; O'Shea & Delahunty, 2018).

## Overarching Themes and Findings

In responding to the questions asked about success and reflections on how a ‘successful’ student could be defined, a myriad of themes and insights emerged in both the interviews and surveys. These have been collapsed into two key foci for the purposes of this chapter namely (1) success as a shifting discourse and (2) success and persistence behaviours.

### Success as a Shifting Discourse

Participants in this study both recognised and rejected dominant discourses related to how success was defined and conceptualised. One example is Bradley (20 yrs, Year 3) who differentiated between a ‘*clinical way to understand a successful student*’, which necessitated tangible evidence such as academic transcripts, and other more embodied or personal ways, which he characterised as ‘*immersing oneself in a series of academic debates and discourses, soaking up the literature of a topic or a field, engaging with the peers who are going to be working in that field with you.*’ Similarly, Brett (33 yrs, Final Year) recognised that while working in the ‘field’ was an obvious objective for success post-graduation, he equally regarded success in a more holistic sense, defined as ‘*the personal growth that I’ve experienced through the application of what it is that you’re learning.*’ Donna (39 yrs, Final Year) also highlighted a delineation between professional and personal success factors when asked to define success:

Oh look, bottom line, it’s grades isn’t it? That’s all that matters to anyone else at the end of the day. It’s what’s written on that bit of paper... [but] I’ve had to kind of reset and look at what “success” is. For me, it would be counter-productive for me to start thinking in that way again about, you know, expectations of me...I perceive that I’m bringing value that’s “success”. If I’m connecting with people and I’m feeling that sort of click and there’s that sense of equilibrium inside me that’s “success”. I can’t look at it any other way now. (Donna)

Donna neatly summarises public definition of success as 'grades' but sitting alongside that and sometimes jostling uncomfortably is a more personal definition related to a sense of 'connection' and 'value'. This and other quotes indicates that amongst this cohort there was both a public or accepted definition of success as well as an alternative more embodied understanding that relied more on personal desires and perceptions.

A number of participants, like Donna, also indicated how their perceptions of success had changed and evolved over time; this shift was sometimes as a result of reassessing their ambitions and also recognising the many competing demands on time and responsibility. Erin described how her personal definition of success was largely based upon the '*amount of time that I actually have for my son*'. So while grades were important it was also the ability to manage all aspects of her life in a balanced way that determined success, which Erin described as being able to '*go for bike rides or go for walks and I can still manage everything else and get good grades – that is really a good way of measuring it [success]*' (Erin, 32 yrs, Final Year).

Success was somewhat a fluid concept, articulated at a deeply personal level, and sometimes in ways that contradicted more popular or politicised discourses and expectations, both during their studies and post-graduation. Evelyn had returned to university in her thirties and now at 38 was in the final year of her Commerce degree, managing her studies along with a disability. Evelyn explained how her definition of success was characterised by the specificities of her own unique situation:

Success for me was getting up in the morning, going to campus and ... it was getting my assignments in on time, making sure that I had everything submitted properly that I was getting my good grades. In spite of the fact that I was having my surgery...you know, in spite of everything.

She continued by explaining that as an older student with caring responsibilities and financial constraints, it was necessary to '*give yourself a break*' and negotiate success according to the material constraints of one's situation:

You can't set unrealistic expectations. You can't say, "My measure for success is the same as the young person who lives at home with her mother and father and doesn't have to work because they're posh lawyers".

Given the individual and somewhat fluid nature of the concept of success the next section explores how understandings of success informed and related to the act of persistence at university.

## Success and Persistence Behaviours

Not surprisingly, understandings of success were closely tied to the act of persisting and ultimately being retained by the institution, summed up by Kimberley (30 yrs, Year 3):

Interviewer: How do you characterise your success? What does it mean to you?

Kimberley: Not giving up. Not giving up.

A number of participants equated being successful as persisting in their degree – given their circumstances and personal contexts, simply getting to the end of their studies was deemed to be a success factor. Merelyn (39 yrs, Final Year) explained how measures of success related to the fact that *I've continued and I haven't given up where I wanted to*. This success was further qualified by the impact her persistence has had on those around her, particularly her children who were witnessing her academic endeavours on the sidelines:

for me success ... will be having that piece of paper, being able to tell the kids, "Yeah, it might have taken me 12 years but I got it so therefore you guys can get it and go to uni and do what you want to do...So I think that'd be my success, showing them that it is possible no matter what you do or how long it takes".

The interrelationship of being successful and managing to stay at university were similarly reflected upon in the survey responses, often expressed in concise or straightforward ways but with equal impact:

Success in uni is the ability to keep going despite any challenges, getting a minimum of passes to lead to graduation... to keep chasing your dreams no matter where they lead you. (A23, Female Survey respondent, 18–20 yrs, Final year)

I think being able to persevere despite wanting to quit many times and getting to the end knowing what you can endure is an amazing accomplishment, because it certainly isn't easy with some of the stress that you go through. (A33, Female Survey respondent, 26–30, Part-time, Year Five)

I finished my degree, that is my measure of success, I made it through many obstacles including physical/mental/financial health challenges to get to it. Success is completion, success is perseverance and success is now being able to wear the cap when I Skype with my nieces/nephews and seeing their faces and answering their questions and inspiring their journeys. (E42, Female Survey respondents, 31–40, Fourth Year)

In interviews, this connection between success and persistence was further qualified through probing questions, with some participants regarding all forms of persistence at university as underpinning 'success' regardless of the length or nature of this academic trajectory. Others, however, qualified the nature of this persistence, identifying certain forms of this behaviour as being more valued than others. This delineation is clearly indicated by Helen (45 yrs, Part-time, Year Five) and Paige (31 yrs, Final Year) who both described their view of 'successful students'. For Helen this was explicitly someone *'who's continued throughout their degree without chopping and changing'* whereas for Paige, it was all about *'trying'* as she explained: *'I'm a successful student, even though I failed something but still got myself up and did better the next time around so...'* While both perspectives similarly regard remaining enrolled at university in terms of 'success', the ways in which this is achieved further qualifies this act in more nuanced ways.

The last two sections have presented the summary findings from a national study that sought to explore how students narrated their persistence at university as well as their perceptions of success and how this was defined on a personal level. Two key themes were explored to highlight how success and retention at university are deeply interconnected for

these participants but sometimes not in the ways articulated by dominant discourses such as obtaining a good job or getting high grades. The reflections of these students emphasises the nuanced and complex nature of these terms, which are sometimes taken for granted in policy or institutional discourse. The final part of this chapter explores the significance of these findings and possible implications for the broader HE sector.

## Discussion and Conclusions

We know that succeeding at university does not automatically result in decreases in social or economic stratification, particularly for those who are considered to be disadvantaged to begin with. The most recent OECD (2018) report highlights how educational mobility has not translated into relative social or income mobility across all Australian populations, with those at the lowest levels of income remaining firmly 'stuck'. Given this situation, reconsidering how success and retention is conceptualised and framed seems key to equity framings moving forward. Despite initially appearing to be transparent and almost 'taken for granted', the enactment and articulation of success and persistence has been highlighted in the previous sections as needing close and considered attention. Examining and questioning how these terms have been constructed reveals how both concepts are deeply embedded in dominant discourses, not only those related to policy but also according to certain forms of knowledge.

Academic success remains largely defined in meritocratic terms with an emphasis on the acquisition of knowledges and the achievement of grades. Despite the clearly embodied nature of this action, attending university remains largely characterised by an understanding of 'individualized life choices' (Lehmann, 2009, p. 632). As such, the more embodied nature of success and the variety of meanings it can engender remain largely unrecognised within the HE space (O'Shea & Delahunty, 2018). Similarly, the act of persisting or being retained is regarded as the responsibility of the student. But as the previous student reflections have indicated, we need to shift this to understand success and retention in more collaborative and connected ways. Such insights are particularly

important within a widening participation framing, given that universities are attracting an increasing diversity of students with a wider multiplicity of rationales and motivations underpinning their educational participation.

To move away from dominant paradigms, I draw upon Walker's (2008) concept of 'widening capability' as one lens to revision our thinking in the field of success and retention. Rather than focus on purely fiscal or meritocratic measures of success, Walker (2008) proposes a need to 'value non-economic ends and more expansive understandings of what is valuable in human lives and for human flourishings' (p. 270). Widening capabilities then involves embedding teaching and learning strategies designed to deliberately nurture the agentic nature of learners, providing the tools and support necessary for individuals to emerge as 'strong evaluators' of future choices and opportunities:

Quality in learning for widening participation students (and indeed all students) would require integrating learning the subject and developing reflexive judgements about what makes life good for that person. (Walker, 2008, p. 271)

One example of such reconceptualisation is to acknowledge the power of critical thinking to support individuals in adopting a critically reflexive stance in relation to their lives (Walker, 2008). Related to this is the need to recognise the possibilities that university offers for choice, this needs to be a big picture understanding of choice based upon the opening up of freedoms and futures (Walker, 2008). The power attributed to such objectives are similarly detailed in earlier research on female first-in-family students (O'Shea, 2014) in which participants celebrated university as offering a space to reflect and reconsider the possibilities in their lives. While this outcome was not necessarily financially enriching, this activity marked an emotional richness appreciated by the female participants in the study. In this way, recognising broader outcomes of HE participation and success provides the opportunity for students to be 'critical and active participants in democratic life' (Walker, 2008, p. 277) rather than simply passive bystanders existing on the sidelines.

A more expansive understanding of participation and success is particularly timely at this point in time, as Australia deals with both an emerging funding regime and an evolving health crisis. As previously mentioned, 2020 heralded the introduction of performance-based funding within Australia with universities measured fiscally in terms of pre-defined indicators including student experience, graduate outcomes, equity group participation and student success. What this article has shown is the variability of such measurements which may differ on a case-by-case basis, for example not all students may regard graduate employment as the desired outcome for their studies (O'Shea & Delahunty, 2018). The fluid nature of such performance indicators is further exacerbated by the recent coronavirus pandemic. The HE environment is currently undergoing radical and global transformation that is leading us to rethink not only delivery but also the ways in which students both participate and engage in learning as well as approaches to managing their learning. We know that this health crisis will have impacts on retention rates of students but equally this disruption offers the opportunity to rethink how HE considers and defines academic success across the student life cycle.

This chapter has deliberately 'opened up' discussion of success and retention to reveal how these terms are considered both publicly and privately. By drawing on the reflections of students, alongside the more dominant policy and institutional discourses, the need for a deeper and interconnected understanding of these concepts has been highlighted. This work points to the need to continually disrupt preconceived ideas or accepted discourses relating to students, their motivations and rationales for participating in HE. As Hinton-Smith (2012) argues, there is a continuing need to 'challenge systems of organization through which different groups of students are sorted, categorised and restricted to particular HE outcomes' (p. 308). By continuing to revisit and question terms such as 'success' and 'retention', there is a possibility to develop an educational landscape that carefully values and supports individual desires rather than simply reframing or negotiating these within dominant political or policy discourses. Such agility and ability to 'think outside the box' will be particularly important as we work alongside COVID-19, which demands that we deeply consider how future HE systems are both defined and enacted.



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# 3

## Student Retention: The Need for Institutional Change

Liz Thomas

### Introduction

As is discussed in Chap. 1, the diversification of the student population is a goal pursued by countries across the world, in an attempt to achieve aspirations related to both economic development and social justice. These objectives can be viewed as incompatible (Castells, 2001), as they are informed by different political ideologies (i.e. individualist and collectivist). But alternatively, social justice and economic growth can be viewed as mutually supportive, as higher education develops the knowledge and skills of individuals and communities, which facilitate both personal and societal economic opportunities and promotes greater cohesion and equality, simultaneously generating a surplus necessary to support the re-distribution of wealth and greater equality in society (Frainstein, 2001). Indeed, many countries are pursuing these dual goals as mutually reinforcing, rather than viewing them as in opposition. For example, in

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Australia, the Bradley Review of Higher Education (Bradley et al., 2008) linked growth in educational attainment with the country's future economic and social well-being, and this reignited the national commitment to widening participation. Similarly, the European 2020 Strategy (European Commission, 2020) commits European countries to achieve a 40% participation rate by 2020, and acknowledges that this requires students from diverse groups to both access and succeed in higher education, and more broadly.

Efforts to increase student diversity and the development of the concept of 'widening participation' have been informed by a dawning realisation that access to higher education is insufficient, but students who historically have not participated need to be enabled to succeed in HE, and indeed once they graduate. Otherwise, inequalities will persist in terms of outcomes, such as completion, attainment and employment, and this will perpetuate social injustice. This has been described as Effectively Maintained Inequality (Lucas, 2001) as students from privileged groups continue to secure advantages, both by using their knowledge of the system and through their cultural capital (such as accent, taste and ways of being) that is recognised and valued in the higher education system and the labour market. Furthermore, new student cohorts are also disadvantaged by other commitments, such as the need to combine study with employment, caring responsibilities or obligations to family. Thus, in most countries, efforts to diversify the student population have not translated into greater equality.

In the European context, the European Higher Education Area has, since the start of the twenty-first century, urged nation states to improve both the access and completion of students from under-represented and disadvantaged groups (Prague Communiqué, 2001). This imperative has been reinforced and developed throughout the process, being extended beyond completion to progression and employability in the Yerevan communique in 2015. In the US, Vincent Tinto, one of the leading figures in higher education research, states that 'access without support is NOT opportunity' (Tinto, 2008). He argues that diversifying the student population but failing to support these students to succeed does not contribute to overcoming social inequality or promoting social justice.

Tinto's research on leaving higher education (1993) has been highly influential; it sees departure, or persistence, as the outcome of integration of students with the academic and social systems of a higher education institution. The model acknowledges that students have different attributes, skills, financial resources, prior educational experiences and dispositions (intentions and commitments) which influence their integration – and their retention. In order to continue in HE, students need to be integrated into *both* the academic and social systems of an institution. This includes participation in formal academic activities, and social interaction with peers and academic staff, including taking part in extra and co-curricular activities (Kuh et al., 2010). Research in Australia, the UK and elsewhere has built on and extended the work of Tinto and other US colleagues. Research in the UK, Australia and New Zealand has identified the importance of student engagement to improve student retention and success (as discussed in Chap. 11).

The focus of this chapter is institutional responsibility for student success, and how institutions should respond to student diversity to promote equality of outcomes, or equity, for all students. It considers alternative institutional responses to student diversity and argues for institutional responsibility and change. A fundamental part of institutional transformation in response to diversity is the learning experience. This is because the academic experience is prioritised over the wider student experience by non-traditional students, and so it is their primary site for engagement and, crucially, it is within institutional control. This chapter goes on to consider whether an inclusive curriculum is sufficient, and looks at the experience and outcomes of commuter students as an example of a group of students who experience intersectional disadvantage. The final part of the chapter considers what is involved in a whole institution approach to diversity, involving both cultural and structural change, and addressing the student lifecycle over time and the breadth of the student experience, beyond learning and teaching.



## Institutional Approaches to Diversity and Institutional Responsibility

The expansion and diversification of the student population has prompted different responses from higher education institutions. A model of 'ideal types' has been developed to help categorise and understand these institutional approaches (Jones & Thomas, 2005). The exact nature of the institutional response, however, will deviate from these ideal types, and be influenced by where the impetus for change comes from; contextual issues such as the structure of the national higher education system and the associated policy environment (including admissions and fees); and institutional issues such as history, values, mission, market position and geographical location.

The **academic** approach focuses on attracting (or admitting) already suitably qualified students from target groups to participate in an un-reformed HE institution or setting. At best, the emphasis here is on raising awareness and aspiration amongst these potential students, but no changes are made to the admissions requirements or processes to support their access to HE. Similarly, no changes are envisaged to the organisation or practices of higher education once these students are enrolled to support them to be successful. Low participation by students from under-served groups is perceived as an attitudinal problem on the part of students, and is assumed to require no systemic or institutional adaptation. Such institutions therefore focus on the provision of information to raise awareness and aspiration. This is an approach that is more likely to be adopted by prestigious institutions, that have little or no interest in increasing student numbers, and are attempting to diversify the student population in response to external drivers, such as national policy requirements.

The **utilitarian** approach views students as lacking both suitable information and aspirations to enter HE, and sufficient prior academic attainment. This approach therefore requires institutions to work to raise students' awareness and knowledge about HE, and either to increase their academic qualifications (e.g. through additional tuition and support), or to change the admissions process, through, for example, alternative entry

pathways (e.g. through a new entry qualification) or changing entry requirements (e.g. to take into context where prior learning occurred, to recognise experiences or alternative qualifications, or to identify potential rather than past achievement). By admitting students who may not have achieved the standard academic entry requirements – and who are unfamiliar with the expectations and norms of HE – additional support is likely to be required within the institution to ensure equivalent study success. Within the utilitarian approach, however, additional support is bolted on to an unreformed HE experience, rather than embedded into the mainstream practices of the institution, which would necessitate institutional change. Research with students who are at risk of leaving HE early indicates that they are, however, unlikely to utilise these additional support services voluntarily, and thus the impact is reduced. This approach is more likely to be used by institutions that wish to use widening participation to reinforce and extend their recruitment and boost student numbers, but without a commitment to change the institution, beyond the provision of support services. This approach can induce resistance amongst staff, as classes increase in size and the quality of students is perceived to go down, and there is a sense that the new recruits are less suitable than traditional students.

The **transformative** approach is premised on the principle that diversity is of value to an institution and the students that study there, and thus it should be embraced and used to develop the institution and the learning experience for the benefit of all students (see Shaw et al., 2007). A transformative approach places emphasis on working in partnership with students and communities to change the HE institution to offer a more relevant and appropriate HE experience, one that is both reflective and inclusive of the student body, and which equips all students to be successful in diverse contexts in a global society. The transformative approach requires the introduction of new courses and modes of delivery, changes to admissions requirements and processes, student-centred curriculum contents, pedagogy and assessment, and more inclusive and flexible organisational structures and cultures to promote and facilitate the engagement of all students. This approach has been slow to be adopted at the institutional level, but when it is embraced, it can be taken as an indicator of ‘maturity’ with respect to widening participation, and examples

are emerging in countries that have had a long-term commitment to diversity and success (as demonstrated through chapters within this book). In England a whole institution approach has been promoted by the Office for Students through Access and Participation Plans, and there are similar national policy edicts in other countries, such as South Africa, Ireland and Australia. Other externalities, including the Black Lives Matters movement and the COVID-19 pandemic, create pressure for, or even compel, change, and at a faster pace and with wider engagement than ever before. Institutional transformation is therefore taking place in more institutions around the globe; the challenge is to ensure that it is underpinned by a commitment to student diversity and success, and informed by research, evidence and effective practice about how to achieve this.

## Transforming the Learning Experience

Much of the transformative work in higher education institutions has focused on the curriculum, for good reason. First, the learning experience is central to the academic success of students; second, many non-traditional students do not engage with the wider student experience (Thomas, 2019a); and finally, the curriculum is controlled by higher education institutions and so can be changed (Kift et al., 2010). Higher education providers can determine what is taught, how learning is organised, how learning takes place and how it is assessed. The curriculum can therefore be used not just to engage students in the formal contents of a course, but to develop their capacity and identity as successful higher education learners, to facilitate engagement in co-curricular activities and to address wider issues such as academic and professional development, and personal health and well-being. The type of curricular approach proposed to maximise success is both student-centred and inclusive.

Student-centred learning can be contrasted with teacher or content-oriented approaches (Kember, 1995). In other words, the learning process is facilitated by the lecturer and the knowledge – and associated understanding – is constructed by the students, as opposed to information being transmitted from teaching staff to learners. This requires active

learning strategies (discussed below) and promotes deeper learning (in contrast to surface learning). A student-centred approach shifts the power from the teacher to the student (Barr & Tagg, 1995), and focuses on the development and growth of students. Thus, student-centred learning is also connected to personalised learning and flexible learning.

An inclusive approach is deliberately and proactively designed to enable full participation by all students (May & Bridger, 2010), by making the learning accessible, relevant and engaging to *all* students (Hockings, 2010). An inclusive approach is not necessarily student-centred but, in practice, a student-centred approach enables a more inclusive approach, as the learning is tailored to their interests and responds to their strengths and challenges, which promotes engagement (Hockings et al., 2009). Universal Design for Learning (UDL) aims to proactively create a learning environment to meet the needs of a diversity of learners by the way the curriculum and learning experience is planned and delivered, rather than in response to specific learner needs.

UDL builds flexibility into the core curriculum through multiple means of representation, action and expression and engagement. Representation refers to offering information in more than one format; for example, both text and video/audio to allow students to process and review information in the way that suits them. This caters for different learning styles, but also assists students with other challenges such as if they are learning in a second language, need to study while commuting, are unable to attend campus, and so forth. Action and expression enables students to interact with the learning materials and each other in different ways, during face-to-face sessions, in their independent learning and for assessments. This might include discussion, role play and problem solving; meeting together face-to-face and online; and being assessed through different formats such as a presentation, a project or an exam.

## Putting the Inclusive Curriculum into Practice

An inclusive curriculum can appear daunting, as it requires teaching staff to make changes to the way they have previously done things, and to have a comprehensive understanding of their students. Some strategies to

develop inclusive teaching are presented here (from Thomas, 2021). Inclusive teaching requires institutions and staff to have good knowledge of their students, in order to be able to plan to be inclusive. This knowledge can be gained through the use of trend data (learning analytics), although this has limitations as it is historical and incomplete (due to the data collected and non-responses). Other strategies to learn about incoming student cohorts find ways to encourage students to share information pre-entry or at the start of the academic year through activities, surveys and conversations. This information is again incomplete, and subjective, depending on what students elect to share, but it can be extremely insightful. Crucially, whatever information is available has to be acted on to develop a more personalised and inclusive approach to engagement and learning.

One aspect to be attended to is the way in which the curriculum is organised. This includes the timetable, independent learning and resources, academic development and pastoral support, professional placements, assessment arrangements and much more. Timetabling can be crucial, but no model is ideal for all students, so flexibility is also required. Blocking timetabled sessions into a limited number of days per week, or into core hours each day, can be helpful, but it is vital that students have this information as early as possible to allow them to plan. Students also need information regarding other expectations about engagement – in, for example, independent learning, co-curricular and development activities. Not all students will be able to attend everything all of the time, so opportunities for flexible and alternative engagement are required, including lecture capture (recording), and participating in activities and group work online. Some institutions have built in flexibility by giving students options about how they participate (online or face-to-face) and in which sessions (e.g. allowing them to select a seminar group that best suits their needs, rather than just allocating groups). Co-curricular activities can be more inclusive if they are connected to the timetabling and teaching of core activities (e.g. during the days when students are on campus, and promoted and referred to in lectures). Professional placements are a source of many challenges for non-traditional students, and often little attention is given to the

circumstances of individual students (e.g. where they live, other responsibilities, disabilities, travel options).

Curriculum contents need to be planned to ensure the formal curriculum is relevant to all students, and that the 'hidden curriculum' is explicit. The formal curriculum can be diversified in two key ways: by reviewing the contents to include more diversity, and by facilitating students to identify and share topics, perspectives and resources that resonate with them. Ideas to diversify the curriculum include a broader reading list, drawing on more diverse scholars, case studies from different contexts, and drawing on alternative traditions or knowledges. Diversification can also be achieved through a student-led curriculum, where students contribute to determine the topics covered (see examples in Thomas, 2015). To be inclusive the hidden curriculum needs to be made explicit; this refers to the unarticulated and often unacknowledged learning and expectations that are embedded within subject norms and practices. This understanding often comes from families and schools, informal interactions with staff and peers, or it may be taught. Making these unspoken rules explicit – for example, by teaching academic and professional skills and expectations – helps to level the playing field, and create a more inclusive learning environment.

Inclusive pedagogy avoids making assumptions about students (including what they are interested in and how they prefer to learn), provides opportunities for interaction between staff and students and with peers, uses a variety of learning and teaching strategies, creates opportunities for learning to become more relevant, and uses face-to-face time to apply learning and develop understanding often in collaboration with others (active learning). Knowing more about the student cohort helps with this, but other simple steps, such as being friendly, using students' names and being accessible, promote students' sense of belonging to the learning community. For example, teaching staff being available at the end of sessions and online helps students to interact and ask questions, but many students do not feel confident to do this, so other mechanisms, such as (timetabled) personal tutoring sessions, are needed to provide opportunities for all students to interact, belong and maximise their success. Active learning strategies help students to engage with subject knowledge and apply it, and so to learn more effectively. Activities such

as problem-solving, practical work and real-world briefs, peer teaching, and making learning resources support the process of applying knowledge and promote deep learning. But to be inclusive the purpose and value of activities needs to be explicit (especially if they are in any way optional), and students need to be taught the skills required, including things like how to engage and work together as a team if this is part of the process. Scaffolding (or guiding and supporting) students' engagement and learning through active processes is vital for all students at the start of their higher education journey, but may be particularly important for students from widening participation groups, and also international students who may be used to more passive learning experiences.

Being inclusive in assessment involves offering more assessment variety and choice, and making the hidden curriculum explicit. Across a programme of study students should experience a range of assessment types, to avoid disadvantaging certain students. Alternatively, choices can be offered to assess the same learning outcomes, unless the method of assessment (e.g. making a presentation) is also part of the learning outcomes to be achieved. In addition, assessment can be more inclusive by unpacking assignments to help all students to understand what is required before they start the assessment (this is sometimes known as feed-forward), or by providing guidance during the process, for example via a checklist, or an opportunity to ask questions. After assessment, feedback should be used to help students understand their grades; often this needs to be integrated into the curriculum, rather than an implicit expectation that students will engage with feedback and use it as feed-forward for their next assignment.

An inclusive learning experience needs to be underpinned by monitoring students' participation (e.g. attendance and engagement in sessions, use of online resources and activities, submission of assessed work). This type of monitoring can be undertaken at different levels, from a particular module to institution-wide, but what is crucial is that students are followed up; the monitoring data can be used to prompt interaction and inform conversations with students to help uncover what is preventing them from engaging fully with the programme of study.

Many of these aspects of putting inclusive teaching into practice can be adopted at the individual level, but they are more effective when there

is institutional commitment to these approaches, which is demonstrated by the necessary structural changes and staff development and support (discussed below). But the next section considers whether an inclusive curriculum is sufficient to improve student retention and success.

## Is an Inclusive Curriculum Sufficient?

To address this question, this section draws on qualitative research with commuter students (Thomas & Jones, 2017). Commuter students is a broad term used to refer to students who remain in the family home while studying in higher education; but significantly they exhibit a range of non-traditional characteristics, such as being more likely to be the first in their family to study in higher education, from a low income background, from a lower socio-economic group, certain ethnic minorities, and being a mature student, and therefore may be typical of many of the widening participation groups we are concerned about. The research has found that these non-traditional students prioritised academic engagement, but placed little or no value on engagement in enhancement activities, or social engagement with HE friends and peers (Thomas, 2019a, 2019b). Commuting can compromise their engagement with the formal curriculum, but they tried to attend sessions and participate in and complete group work.

Enhancement activities, especially professional development opportunities such as leadership roles, volunteering and career-related activities were often de-prioritised, largely due to timing (e.g. being offered during the evening) and students wishing to minimise the number of trips to campus and the time spent on campus. When commuter students participated in these enhancement activities it was more likely to be in those emanating from their academic departments, such as being a subject ambassador or mentor at an open day or in a local school. These typically took place during the day and were associated with teaching staff with whom the student had a connection. In addition to the practical challenges of commuting, students did not appear to value, and therefore prioritise, enhancement activities. For example, there seemed to be a widespread lack of awareness of the premium that prospective employers



would place on participation in extracurricular and leadership activities. Rather, many mistakenly believed that academic achievement would be sufficient to realise their graduate career ambitions, and therefore many explicitly prioritised their academic study and success over other types of involvement on campus.

Commuter students had particularly low levels of social engagement in formal clubs and societies and informally with higher education friends and peers – and did not make friends through living in student accommodation. The practical challenges of socialising with HE friends were cited, but again students saw little or no value in social engagement, while some framed socialising negatively, as a distraction from their studies, and saw commuting as a positive way of enabling them to achieve their academic goals. But friendships and interaction with other students help students to be successful in their academic studies (e.g. discussing and understanding challenges of a particular assignment), and facilitate further engagement in social and enhancement activities (as you have someone to go with). Peers can also provide access to understanding about the value of enhancement activities, for example groups of students share their knowledge about how to get a graduate placement or job in a particular sector or field.

Arguably (Thomas, 2019a, 2019b), commuter students and many other non-traditional students lack cultural capital and (relevant) social capital, which results in less understanding of the value of wider engagement – and fewer opportunities to engage. The solution, however, is not simply better information for would-be commuter students, but rather higher education providers also need to change. In particular, the organisation of the curriculum frequently ignores the very real challenges of commuting to study, spreading contact time and other opportunities across the week, having early and late finish times and not making effective use of the virtual learning environment and online communication tools. Some institutions have been looking at other organisational changes to help develop a more ‘sticky campus’, from providing commuter students with spaces to heat up food and spend time, to offering more leisure activities during the day. But there is also the institutional culture to consider: the majority of staff implicitly believe that a residential HE experience, akin to their own, and incorporating the wider student

experience, is the gold standard that all students should aspire to achieve. In the UK at least, academic staff often feel exasperated that many contemporary students do not conform to this model, and students feel that they are not being valued because they are not being seen on campus (Thomas, 2019b). Across higher education institutions there needs to be greater appreciation of the complexity of lives of many students, the ways in which they do engage, and their other roles and activities outside of the institutional boundaries. Indeed, other transformative approaches that institutions can adopt include greater recognition of the external engagement that students undertake, including helping them to recognise the skills they are developing such as time management, problem solving and working independently; and acknowledging the additional roles that they undertake such as combining studying with caring and employment, or contributing to their local communities both as role models and through direct action with schools, religious groups and other community settings.

External engagement can be not only recognised but encouraged by providing opportunities for engagement in popular commuter locations, for example by helping to set up local buddies or study groups, or facilitating volunteering. This provides a practical way to both extend the reach of the institution into local communities and to enable students to increase their engagement in enhancement and social activities. Finally, there are ways in which institutions and student associations can promote and facilitate wider engagement (in enhancement and social activities) through technology. Many opportunities on campus are only delivered or available face-to-face; student diversity necessitates greater use of online solutions, but this has been slow to occur, until COVID-19, which quickened the pace of these developments. These types of change are informed by a transformative approach which recognises the benefits of diversity and, in the case of commuter students, offer valuable links with local and regional communities.

A transformative approach requires the learning experience to be radically overhauled. Much of the responsibility for this falls onto teaching staff, but this can be facilitated or limited by structural issues, such as the organisation of the curriculum or requirements or expectations about being on campus and engaging in specific ways. In addition, the culture

of the institution needs to be changed to better understand and value non-traditional students and enable them to succeed in ways that may not look and feel the same as the success of the staff who currently ‘inhabit’ higher education institutions. Further structural and cultural changes can make not only the learning experience more inclusive, but that of the wider student experience. These issues, addressing cultural and structural change, and aligning the whole student experience, are addressed in the next section considering a whole institution approach to diversity and success.

## A Whole Institution Approach

A whole institution approach to widening participation aims to achieve equality of outcomes across the student lifecycle (including access, completion, attainment and progression), and across the student experience (i.e. beyond the academic experience and encompassing the wider student experience). It also aims to ensure that this is consistent across the institution, and is not dependent on the subject studied, or the teaching staff a student is allocated. This requires an explicit institutional commitment to diversity and success, and all staff and students understanding their contribution to this goal, but it needs to be underpinned by some key conditions. Institutional policies, processes and the allocation of resources need to reflect this commitment and priority; and staff have to be recruited and developed to ensure they have the appropriate skills and capacity to contribute. Institutional data and evidence need to be used to inform changes, monitor students and hold staff accountable. The work needs to be co-ordinated across the institution to share practice, promote consistency and avoid gaps and overlap of provision.

Research to understand a whole institution approach to widening access and improving student success (Thomas, 2017) found that HE institutions are best understood as a *complex* system, with multiple groups contributing in varying ways to the HE experience in general, and the goal of inclusion in particular. This makes governance challenging, and results in differential experiences and outcomes for students, which are shaped by localised interventions. Multiple and variable contributions to

the institutional goals can result in fragmentation and incoherency, risking duplication and gaps in provision, and even ‘competition’ between comparable interventions, resulting in staff frustration and student confusion. This indicates the potential value of seeking to emulate, at least to some extent, a *complicated* system – where there is a fixed, albeit complicated, way in which things operate – to seek to achieve more certainty in the processes, experiences and outcomes for students through a more uniform and co-ordinated approach. However, the desire for consistency needs to be tempered by the need for staff engagement and localised solutions to specific challenges.

A top-down, bottom-up approach (Kift, 2009) combines structural and cultural elements to bring about institutional change to engage students from under-served and excluded groups and to facilitate study success comparable to the general student population. Culture refers to the values, attitudes and practices of the staff (and students) within the institution, while structure refers to the institutional policies, processes and organisation (e.g. of financial and human resources) of the institution and its sub-units. The structure can facilitate the institutional culture (and bottom-up work of staff and students) or frustrate it; structure contributes to the consistency of outcomes across the institution by, for example, co-ordinating widening access activities and ensuring an inclusive curriculum across the board. The interplay of culture and structure – the top-down, bottom-up approach – should enable people to be sufficiently well informed and have the capacity and commitment to implement inclusive practices, while the structure both helps to ensure this and provides co-ordination across the institution, promoting integration and consistency – and avoiding duplication, fragmentation and gaps in provision.

*Culture* (values, attitudes and practice of the people within the HEP, contributing to bottom-up approaches) includes:

- **Leadership:** Managers at all levels understand, promote and are informed by Widening Participation (WP) principles.
- **Values, attitudes and practices** of academic, professional and support staff reflect the institutional commitment to diversity.

- **Students and alumni** understand, value and contribute to the institutional commitment to diversity.
- **People meet together** to discuss diversity and develop their practice.
- Staff from across the institution feel confident to **initiate and implement diversity** interventions and practices.
- **Staff use the available data and evidence** to inform their decision-making and practices.

*Structure* (policies, process and organisation within the HEP, which can be understood as top-down approaches) includes:

- **Staff policies and processes** – recruitment, induction, annual review, professional development and promotion reflect diversity, including for senior managers.
- **Staff development and training** is provided to all staff to support diversity.
- **Academic experience policies and processes** (e.g. learning, teaching and assessment, quality assurance and validation processes, annual monitoring) embrace diversity.
- **Student support policies and processes** relating to academic, personal, financial and professional development meet the needs of under-served groups.
- **Student recruitment and admissions policies and processes** reflect diversity.
- Policies and processes to enhance **employability and access to post-graduate** study meet the needs of under-served groups.
- **Structures facilitate dissemination** – sharing information and practices and enabling people to contribute.
- **Strategic** (not just operational) **leadership for diversity** provides guidance and co-ordination, rather than direct implementation.
- **Diversity resources are allocated across the institution**, or are available to all staff, not retained centrally.
- Institutional processes make **data and evidence** accessible so that it can be used to inform strategic and operational decision-making and practice.

- **Staff use the available data and evidence** to inform their decision-making and practices.
- Institutional **accountability** procedures, including key performance indicators, incorporate diversity-goals.

Developing an institutional structure that promotes WP can be understood to involve:

- Ensuring policies, processes and organisation take account of WP and diversity (structure as **espoused**)
- Considering the extent to which structures are **enacted** (i.e. they are implemented and move beyond paper-based aspirations or statements)
- Assessing the impact or **effect** of the structure on under-served students.

Developing an inclusive culture can be understood to involve:

- Raising people's **awareness and understanding** of the issues
- Developing people's **skills and capacity** to deliver inclusive practice
- Ensuring people behave inclusively and deliver inclusive **practice**
- Demonstrating the **impact** of people's practice on the experiences or outcomes of students from target groups.

As implied in the work of Kift (2009), there is a relationship between the cultural characteristics of a whole-institution approach – the values, attitudes and practices of the 'people' (staff and students) – and the structural features – the policies, processes and organisation (of financial and human resources). The structure can promote, 'nudge' or 'push' people towards the desired culture. Structure also plays a key role in avoiding fragmentation – characterised by duplication, gaps, competition and inconsistency – and promote integration. Drawing from the empirical research with institutions the essential strategies for implementing a transformative approach to diversity seems to require:

1. Vertical alignment: A student lifecycle approach including pre-entry, on course and progression to employment is adopted.

2. Horizontal alignment: Staff from departments, services and units from across the institution are involved (i.e. not just staff employed to support diversity).
3. Institutional commitment and leadership: There is a clear and explicit institutional commitment to diversity, including defining target groups and expected outcomes.
4. Pragmatic approach to change: A top-down, bottom-up approach is adopted, developing a culture and structure that promote and support inclusivity and consistency. This incorporates:
  - (i) Staff capacity and engagement: The values, attitudes and practices of the staff and students within the HEP promote and support diversity.
  - (ii) Institutional structures facilitating ownership and communication: The institutional policies, processes and organisation (e.g. of financial and human resources) of the HEP and its sub-units promote and support diversity across the institution.
  - (iii) Being evidence-informed and accountable: Data and evidence is used to understand the issues, ensure staff accountability, monitor student experience and outcomes, inform strategic and operational decision-making, and evaluate the process and impact.

## Conclusion

This chapter has argued that there is a pressing need for institutional change to improve the success of students, especially those from non-traditional (widening participation) backgrounds. Historically institutions have been able to diversify their populations by cream-skimming the bright students from those currently not participating, or by changing their entry requirements, but not paying sufficient attention to the differential outcomes of new student cohorts. These two approaches can be contrasted with a transformative approach which views diversity as a positive force for change, and works to create an inclusive institution in

which all students can succeed, and be successful in a global society. Much of the initial work to transform institutions has focused on the curriculum and learning experience, and while this is essential, it may not be sufficient. Non-traditional students (as exemplified through the discussion of research with commuter students who exhibit intersectional disadvantage) tend not to engage in many aspects of the wider student experience, which contribute to academic success and equivalent graduate outcomes.

A whole institution approach is required both to ensure an inclusive learning experience, and to enable all students to benefit from the advantages accrued through engagement in the wider student experience (especially engagement in social and enhancement activities). While many of the curriculum changes can be made at the level of individual staff, this is not sufficient. To create an equitable system, consistency is required for all students, and this involves all staff playing their part, not just champions, necessitating cultural change. Structural changes are also required to enable a fully transformed learning experience, and to ensure all staff and processes are contributing, or not hindering, the development of an inclusive institution and whole student experience. A transformed institution is a challenging vision, but it is necessary to achieve equality of outcomes for students from diverse backgrounds, otherwise higher education providers are continuing to reinforce inequality, both within their boundaries and in wider society.

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# 4

## Student Engagement: Key to Retaining Students

Nick Zepke

### Introduction

The chapter addresses three questions: (i) how are student *retention, success and engagement* understood in higher education? (ii) is student engagement key to retaining students? (iii) what conceptual and practical insights do reflections on international engagement research yield about engagement's influence on retention and success? An answer to the first question is that retention and success have overlapping but distinct meanings. Retention is chiefly concerned with institutions' completion and continuation rates. Success also considers students' own goals and desired outcomes. Student engagement is complex with varied understandings. For example, some researchers consider engagement to be an individual student's psychosocial state: their behavioural, emotional and cognitive connection to their learning (e.g. Fredricks et al., 2004). Others argue that it is more and includes ecological and political dimensions (e.g.

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Lawson & Lawson, 2013). Thousands of engagement studies have been published with evidence to address the second question (Evans et al., 2015). Four overarching international research projects offer conceptual and empirical evidence that engagement is key to retention and success: (i) the large National Survey of Student Engagement (NSSE) in the USA; (ii) Transition Pedagogy (TP) in Australia; (iii) the What Works? student retention and success project from the UK; and (iv) retention and engagement projects from New Zealand. These projects are used to mine much of the evidence to support the arguments in this chapter. A critical reflection on the case studies and evidence from other research addresses the third question.

## Understanding Retention, Success and Engagement

The meanings of retention, success and engagement are contested. Each construct has been widely researched and described but still lacks a universally accepted definition. Together, these terms fit Krause's (2012) account of a wicked problem: ill defined, imbued with conflicting points of view and lacking either a tidy or permanent explanation. To make sense of such terms we must recognise them as complex. Cohen, Manion and Morrison (2011) identified complexity theory as an educational research paradigm that gives meaning to complex constructs. Student retention, success and engagement are complex because they are constructed from both similar and different but interacting variables, avoid simple linear cause and effect explanations and replace them with organic, non-linear and holistic understandings. They provide emergent, context-specific conceptions of learning and teaching that draw on feedback loops, adaptations, self-organisation and interactions between learners and their environments within an ever-changing ecosystem.

Their complexity becomes visible when we examine the constructs more closely. Three distinct yet interweaving influences shape them. One focuses on personal growth within individuals. Factors such as cognitive development, motivation and identity formation are examples (Kahu,

2013; Ryan & Deci, 2017). Another focuses on how classroom-related factors such as teaching, institutional practices, societal and ecological influences impact student learning. Pascarella and Terenzini (2005) synthesised a large body of research about the importance of teachers and teaching and the influence of institutional environments on learning. In addition to teaching and institutional environments they found students' families, genders or cultural backgrounds impacted learning. This provided a third influence in student retention, success and engagement. Such person–environment understandings draw on psychology and sociology but also on analytic science, critical pedagogy, phenomenology, post-structuralism, political economy and cultural studies while simultaneously looking for connections and differences between them. An integrative view of retention, success and engagement emerges with emotions, thinking, behaviours and agency impacted by different social, cultural, ecological and political influences (Buckley, 2018; Lawson & Lawson, 2013; Zepke, 2019). This third and emergent holistic perspective underpins how I understand student engagement, retention and success.

## Student Retention and Success

Student retention is easier to pin down than success. It is understood as students completing a course of study or continuing it after passing through check points such as assessments or enrolment periods. According to Tinto (2017), retention has mainly been connected to institutional performance: the proportion of students completing their courses and the rates at which they are retained. A major focus of retention research is to understand what institutions can do to improve retention rates. Multiple explanations exist (Nelson et al., 2014). In the main, they focus on integrating students into an institution's existing culture. Pre-eminent here is Tinto's longitudinal interactionist model of student departure (1975; 1993). He theorises that when students enrol in higher education, they leave their original culture to enter a different, an academic culture. Students who leave early have not succeeded in integrating into this new culture. Institutions, therefore, must act to ease the transition, help students to integrate, and thereby optimise their retention and success. His

1993 model has six progressive phases, including two that focus on students' social and academic integration. Much student retention research focuses on these phases. Empirical studies have tested and often validated them (Braxton & Lien, 2000).

Although dominant, the integration discourse, has been questioned. Research has shown that students from families unfamiliar with higher education culture, such as those from minority backgrounds, can find it difficult to integrate. Such students can feel they don't belong in university (K. Thomas, 2019). To fix this, universities have adopted various retention strategies such as teaching study-skills to 'fill students up' with required cultural capital (Thomas, 2002). This view from the integration discourse positions students from minority cultures as culturally deficient. To counter this deficiency view, its critics use Bourdieu's (1973) idea of cultural capital to improve retention. Cultural capital theorises a university of norms, values and practices such as habits, manners, language, educational credentials and culturally specific learning tools that advantage holders of such capital. L. Thomas (2002) suggests students with cultural capital fitting university culture are like 'fish in water' and likely to persist; those without are like 'fish out of water' and likely to leave early. Students, who by virtue of their ethnicity, age, gender, socio-economic status, lifestyle and beliefs, do not hold necessary cultural capital, are at risk of experiencing cultural alienation and early departure. Zepke and Leach (2007) suggest that institutional cultures that adapt traditional norms, values and practices more to fit students' diverse cultural experiences have better chances of retaining them.

Tinto (2017) observed that both retention discourses are focused on what universities can/should do to improve retention rates. But, as he argues, students don't seek to be retained. They want to persist to succeed in achieving their own goals. Student and institutional success objectives connect but are not the same. While the institution's interest is to increase the proportion of students who succeed by graduating and gaining employment, students want to succeed by meeting their own goals and these may be more complex than passing courses or gaining qualifications. Their goals are constantly changing with contextual influences, such as their perceptions of belonging, their judgement of the quality of teaching and the curriculum and the state of their health, finances,

relationships and life outside the institution affecting them (Cvetkovski et al., 2018; Tinto, 2017). According to Cvetkovski and colleagues, success is more than mere retention brought about by policies of integration that enable the success of students who fit traditional academic culture or who have appropriate prior educational qualifications, origins or states of health. Consequently, Osberg's (2015) idea appeals that a student's transition to engagement in learning is more helpful to understanding student success than is retention, as it offers a better account of the complexities of a learning journey than retention.

## Student Engagement

Student engagement has featured in educational research since the 1980s and has enjoyed ever increasing prominence since the mid-1990s (Trowler, 2010). Recently, Tomlinson (2017) suggested that student engagement is pre-eminent in higher education (HE) due to its presence at all levels of its ecosystem. At a macro-level, engagement aligns with policies supporting the market-driven political economy of neoliberalism. At this level government policy goals want higher education to provide a quality student experience that ensures student success, enhances engagement of students from diverse backgrounds, achieves high levels of course completions and secures passports to employment with positive attitudes to lifelong learning (Yorke, 2006). At a meso-level institutions implement policies from the macro-level by privileging curricula that are practical and economically useful; creating a climate of performativity in which engagement and success are measured; and abiding by an accountability regime that monitors and publicises how well performance standards are met (Zepke, 2017). At a micro-level engagement promotes student-university learning relationships by informing and guiding students' lived pedagogical experiences in an educational interface (Kahu & Nelson, 2018; Kahu et al., 2020). Here learners engage by building self-efficacy, positive emotions, feelings of belonging and well-being. But student engagement seems more than a psychological construct focusing on the emotional, cognitive and behavioural engagement of individual students. Its impact is also socio-ecological and includes classroom,

institutional, community and political influences shaped in a specific cultural and political climate (Lawson & Lawson, 2013).

Possibly because of this widespread reach, student engagement suffers from conceptual fuzziness that hampers development of a universally accepted definition. Ramsden and Callender (2015) capture this by describing student engagement as a convenient expression of almost any appealing form of teaching for student success. Greater clarity would be achieved by viewing engagement not as a unitary definable construct, but as distinct yet overlapping meaning and practice perspectives. One such perspective draws mainly on behaviourist psychology. It highlights behaviours that motivate students to deep and active learning at the micro-level of the HE ecosystem (Ryan & Deci, 2017). An example is the National Survey of Student Engagement (NSSE) which measures engagement by how deeply students invest in purposeful learning and the effort institutions devote to enabling it (Kuh, Kinzie, Schuh et al., 2005). A second offers a psycho-social perspective at the micro- and meso-levels. It synthesises insights from both psychology and sociology (Pascarella & Terenzini, 2005). Engagement grows by learners' own effort but is supported by social systems such as found in institutions, curricula and teaching. A third perspective employs a socio-cultural lens at micro- and meso-levels. It recognises engagement as holistic and life-wide (Barnett, 2011), offering students a sense of belonging in HE regardless of background, prior study, work and life experiences. The fourth perspective is socio-political and impacts all levels. Here students achieve success as active citizens (Zepke, 2017) who question ideological domination, develop critical consciousness, foster empowerment and act to change society (Brookfield & Holst, 2011).

## **Evidence: Student Engagement Is Key to Retention and Success**

These four meaning perspectives about student engagement have been well theorised and researched (e.g. Buckley, 2014; Fredricks et al., 2004; Nelson et al., 2012; Trowler, 2010; Zepke, 2019). Such authors agree



that, when considered as a generic construct, student engagement is key to student retention and success. They concur that variables such as students' active learning behaviours, motivation, deep thinking, self and cultural awareness, emotional commitment, social background and support from families, institutions, and teachers are key contributors to retention and success. But they also differ by choosing which of the many variables are the most important. This division of opinion demonstrates engagement's complexity and helps to explain the emergence of the different meaning perspectives which also helped to generate an active empirical research programme. Evidence from four such projects is now used to provide support for why student engagement is key to retention and success: the NSSE in the US (Kuh et al., 2008; McCormick et al. 2013); Transition Pedagogy in the first-year in Australia (Kift, 2009, 2015; Kift & Nelson, 2005); What Works? in the UK (Thomas, 2012); and Active Citizenship in New Zealand (Zepke, 2017). Together, these projects cover all four meaning and practice perspectives and all levels of the HE ecosystem. But they use different methodologies and methods, have diverse theoretical orientations and highlight different features of the engagement construct.

The NSSE surveyed about 1.6 million undergraduates in 1500 HE institutions between 2000 and 2013 (McCormick et al., 2013). Its roots are found in diverse research projects conducted prior to 2000 with mainly a behavioural focus such as the importance of student and institutional effort. NSSE was refreshed in 2013 after a lengthy review. Changes made to the original survey offer a number of new items and reframe the original five benchmarks into ten engagement indicators nested in five themes: academic challenge; learning with peers; experience with faculty (teachers); campus environment; participation in high impact practices. Both versions understood engagement as student and institutional behaviours at the micro- and meso-levels of the ecosystem but also noted the supportive political forces operating at the macro-level. NSSE has been evaluated extensively for its effectiveness in improving student outcomes such as retention and student success. According to Kuh et al. (2008) correlational research shows that

student engagement in educationally purposeful activities during the first year of college had a positive, statistically significant effect on persistence, even after controlling for background characteristics, other college experiences during the first college year, academic achievement, and financial aid. This is another piece of evidence consistent with the large body of research indicating that engagement matters to student success in college (p. 551).

Transition Pedagogy (TP) is an Australian whole-of-student, whole-of-institution approach to facilitate the retention and success of students from diverse cultural, social, geographical and class backgrounds during their first year of study (Kift, 2009, 2015; Kift & Nelson, 2005). TP developed alongside a large national quinquennial survey of the student experience conducted between 1995 and 2010 (James et al., 2010) as well as other research into student retention, success and engagement in their first year of study (e.g. Gale & Parker, 2011; Krause & Coates, 2008; Lizzio & Wilson, 2004). TP focused on the meso- and micro-levels of the education ecosystem but acknowledges the political will at the macro-level to improve the first-year experience. It views engagement largely from a psycho-social perspective where students from diverse backgrounds can succeed within a supportive environment. Its main point of difference from the other studies is its emphasis on the curriculum. TP concentrated on six curriculum principles to achieve student success: transition, diversity, design, engagement, assessment/evaluation and monitoring. From institutional case study research across Australia, Kift (2015) confirmed the curriculum as the organising device, the glue, that holds the First Year Experience (FYE) together. She found that engagement in the curriculum is key to creating the conditions for learning success. It is within the first-year curriculum that commencing students must be engaged and supported to realise success such as persistence, positive learning relationships, respect, trust, connectedness and feelings of belonging.

In the UK, the What works? Student Retention and Success research generated an evidence base for achieving high retention and completion rates through seven projects involving 22 higher education institutions over three years. Mixed methods such as student surveys, qualitative investigations and institutional data supported the findings, which

provide ‘powerful evidence of the importance of student engagement and belonging to improve student retention and success’ (L. Thomas, 2012, p. 9). It offered a point of difference to the other studies by highlighting the importance of students believing they belong in higher education and can work in partnership with teachers. Bourdieu’s (1973) writings on cultural capital and habitus helped underpin this understanding. The What Works? projects arguably used a socio-cultural perspective to identify ways to advance student retention and success. The project team focused on the micro- and meso-levels of the education ecosystem, but was aware of, and referred to, macropolicy contexts (Thomas et al., 2017). Findings showed student engagement is key to retention and success by facilitating belonging through supportive peer relations, positive relationships with teachers and administrators, successful knowledge acquisition, self-confidence as successful learners and experiences that help advance their interests and future goals (Andrews et al., 2012).

In New Zealand, Zepke and colleagues conducted funded mixed-method studies with first-time enrolled students and their teachers into student retention, engagement and learning centred pedagogies. Operating from a socio-political perspective, the studies found that macro-, meso- and micro-levels of the education ecosystem were all key to understanding engagement’s impact on retention, and success (e.g. Zepke, 2019; Zepke & Leach, 2007; Zepke et al., 2005). Many of their findings agreed with those in other studies. A conceptual organiser revealed these similarities: the importance of motivation to meet students’ own goals; positive interactions with teachers and other students; institutional support such as a good library and internet access; and managing impacts on study from outside the academy (Leach & Zepke, 2011). A major point of difference was the inclusion of active citizenship into the conceptual organiser. This recognised that education’s effects were life-wide and expected students to participate actively in their institution and their communities. This led to a critique of student engagement as uncritically aligned with neoliberalism particularly at the macro- and meso-levels of the education ecosystem (e.g. Zepke, 2017); a view shared by others (e.g. Buckley 2018; Carey 2013; Macfarlane & Tomlinson, 2017).

These case studies offer four similar yet also different readings of student engagement. They are similar in providing evidence for improving the student experience and success. They offer practical and generic ideas for what works to improve engagement in learning for students from diverse backgrounds. They agree that to be engaged, students must believe they belong in HE; that both student agency and supportive institutional structures are needed for students to succeed; that relationships matter; and that engaged students, their peers and teachers work as partners to succeed. However, the studies used different methodologies, meaning perspectives and focused attention on different levels of the education ecosystem. They offered distinct points of difference in how they synthesised and weighted their findings. For example, NSSE emphasised active learning, TP an engaging curriculum, 'What Works' belonging and partnership, the New Zealand studies active citizenship. Together, these studies provide strong evidence in support of the proposition that engagement is key to student retention and success. In the next section I critically reflect on why these and a selection of literally thousands of other engagement studies have been so influential in mapping pathways to increase retention and student success (Evans et al., 2015).

## **Why Engagement Is Key to Retention and Success: A Critical Reflection**

Student engagement research provides convincing quantitative and qualitative evidence to show HE administrators and teachers its key role in achieving desired student outcomes (Kimbark et al., 2017). However, acceptability in HE is not only due to research evidence and its approval by stakeholders. The ascendancy of neoliberal ideology since the 1980s has forged student engagement into an HE powerhouse. Neoliberalism prioritises standardisation and control of quality, high stakes accountability, a curriculum of economically useful knowledge and corporate style management (Fuller & Stevenson, 2019). These priorities create an audit culture driven by accountability systems to assure the quality of students' educational experiences, particularly first-year students from diverse

backgrounds (Shah & Richardson, 2016). Engagement research supports the audit culture by providing evidence for one-size-fits-all understandings of quality using generic indicators of what works in any learning situation, nationally and internationally. This enables national and institutional policymakers to benchmark and compare, reward and punish institutional and individual performances. The four case studies and an avalanche of other engagement research alert governments to engagement's potential for benchmarking high-quality student experiences, student retention and success. This has cemented engagement's key role in the emerging quality discourse (Lubicz-Nawrocka & Bunting, 2019).

The term 'governmentality' further explains why people inside and outside the academy see engagement as key to retention and success. According to Foucault (2008) governmentality describes the process by which the conduct of conduct is shaped through accepted norms within a framework of set ideas, strategies, policies and technologies that shape people's views and behaviours. Norms about HE, moulded by neoliberal priorities and research evidence, fashioned policymakers, academics and students into champions of student engagement. This enabled governments across the globe to use norms about quality to promote student experiences that emphasise engagement, retention and success. Engagement researchers were aware that the goals of neoliberal governance and engagement research were symbiotic. Kuh and colleagues, for example, observed that the NSSE survey instrument supports neoliberal policy orientations and that neoliberal policy in turn supports the NSSE (Kuh et al., 2006). Indeed, the NSSE has become a key quality performance technology in the USA as well as in other countries. While Kuh and colleagues seemed to welcome the reciprocal relationship between neoliberalism and student engagement, other engagement researchers, while recognising the mutuality, are critical (e.g. Buckley, 2018; Carey, 2013; O'Leary & Wood, 2019; Zepke, 2017) as I will discuss later in the chapter.

## Reflecting on the Interdependence of Research and Politics

The interdependence of engagement research and politics enables governments to standardise and control HE. They develop accountability frameworks consisting of generic quality indicators to measure and shape university behaviours and, in particular, the student experience. At the macro-level governments use a range of overlapping and at times confusing quality frameworks which are often similar across countries but not the same (Ball, 2019). In most countries, institutions must gather and publish student opinions from satisfaction surveys. Governments use them to assess and assure quality provision in institutions. Many countries, for example the UK, use centrally designed quality teaching frameworks to assess levels of excellence in teaching, understood as achieving successful outcomes such as retention (O’Leary & Wood, 2019). Other governments, for example New Zealand, use regular subject, departmental and institutional audits. Panels of internal and external stakeholders inspect documents and conduct interviews with students, academics and interested parties in the community to evaluate quality of provision. Published reports subsequently commend and critique performance. Some, like Australia, reward with performance-based funding. Yet approaches to measuring and publicising quality can differ. For example, Australia introduced performance-based funding in 2004; the UK did not (Shah & Richardson, 2016). But as Lubicz-Nawrocka and Bunting (2019) observed, most macro-level quality frameworks recognise student engagement as crucial to assuring quality in the student experience.

At the meso-level institutions are expected to implement ideas, systems and policies required by governments at the macro-level. The interdependence of neoliberalism and research is clear. For example, quality performance measures of the student experience used at the macro-level are widely used to publicise institutional performance to attract students, particularly those from diverse backgrounds who are prone to depart early. Although specific accountability measures can differ, student surveys, quality audits and league tables are often employed. Many of the findings in the four case studies are present in quality frameworks in their

own and other countries. In Australia, for example, Shah and Richardson (2016) examined the strategic plans of 33 Australian universities about the importance placed on the student experience. They found that 27 (or 81%) of the universities highlighted the student experience as outlined in TP in their own plans. Five repeating strategic priorities addressed the quality of the student experience; quality learning experiences; students feeling supported and included; rankings and performance assessment, and the teaching-research nexus. The quality of student engagement, retention and achievement in the first year featured consistently. Many institutions recognised the value of university-wide student engagement plans that offered students high-impact learning experiences resulting in retention and successful graduate outcomes. While not directly or causally connected, the affinity between institutional strategies and the four case studies is clear.

Examples of such affinities abound. TP's curriculum focuses on engagement, its just-in-time, just-for-me support, and its encouragement of a critical sense of academic and social belonging often feature in institutional strategies. The notion of 'belonging' found in the 'What Works' and TP projects is similarly present in many policy frameworks. According to K. Thomas (2019), 'belonging' can be equated with student engagement, the quality indicator of choice in many institutional quality frameworks around the world. Results from the NSSE in the USA have influenced world-wide pursuits of institutional quality. In researching the practices of 20 successful higher education institutions, Kuh, Kinzie, Schuh et al. (2005) found that NSSE results provided high quality student experiences, featured student engagement and success, foregrounded learning, established high expectations among students, aimed for continuous improvement, invested in support services, asserted the importance of diversity and difference and prepared students for learning in higher education. In New Zealand, Zepke and colleagues (e.g. Leach & Zepke, 2011) found that institutional quality processes were vital promoters of student engagement, retention and success. They suggested that student success was more likely where institutional systems focus on high expectations, invest in a variety of support services, value diversity, and seek continuous improvement.

The interdependence between engagement research and neoliberal priorities is less obvious at the micro-level. At this level teachers probably think more about their students' learning needs than their accountability to institutional or national quality systems. Nevertheless, we work in an accountability-driven era and cannot escape the demands from the macro- and meso-levels. Assessment, for example, has become a key indicator in quality teaching accountability frameworks. Australia and the UK have implemented similar but not the same quality frameworks measuring teaching. Australia's Higher Education Standards Framework and England's Teaching Excellence Framework use metrics from student surveys about, for example, course design, course structure, assessment and relationships with and engagement of students (Gardner, 2018; O'Leary & Wood, 2019). The USA and New Zealand don't have compulsory national quality teaching frameworks. In the USA, divided federal and state responsibilities inhibit such frameworks. However, both the Spelling Commission (2006) and sundry researchers (e.g. Deeming & Figlio, 2016) recommended that existing surveys such as NSSE were suitable substitutes. New Zealand has long debated the introduction of a teaching quality framework without results (Suddaby, 2019). However, a voluntary teacher award system operates, and periodic audits include items such as the student experience, engagement and academic performance (Universities New Zealand, 2018).

## **Enriching Engagement Practices at the Micro-Level**

Using the case studies and other engagement research I now discuss three practices common in the case studies and wider literature that enrich student engagement and promote retention and success at the micro-level of the HE ecological system. The case studies suggest that positive student relationships with teachers, peers and the curriculum are essential for student engagement, retention and success. Student self-belief that they belong in HE underpins such relationships and engagement. Student agency and collaboration also contribute to self-belief and feelings of belonging. Such findings are echoed and expanded in 'Appreciative Inquiry' (AI), a strengths-based approach to engaging learning (Bushe,



2013). AI promotes students' belief that they bring cultural, educational and personal strengths to their learning. Bushe identified five practices that strengthen self-belief, relationships, student engagement and success. The first holds that self-belief is nurtured when students co-construct knowledge in partnership with teachers, peers and significant others. The second proposes that when students learn to reflect on their own experiences, they increase their understanding of how they learn and engage. The third holds that public stories about their successes increase students' self-belief and engagement. The fourth suggests that when teachers and significant others encourage students to develop and follow positive future visions and goals, they assist engagement. The final practice emphasises constructive and timely feedback. In short, AI suggests that when students themselves, teachers and significant others appreciate their own and others' strengths, greater engagement in learning, retention and success follow.

The case studies also show that learning partnerships between students, their teachers and their peers offer direct pathways to engagement and success. Partnership goes beyond students being consulted about, and participating in, learning activities with teachers. It involves collaboration, joint decision-making and shared ownership of what happens in the classroom (Kift, 2015; Snelling et al., 2019; Thomas, 2012). Research into teaching–learning partnerships thrives in many parts of the world. Healey et al. (2014) found that partnership is positively linked with learning gain and transformation. They suggest four possibly interlinked partnership formats: (i) planning and conducting learning, teaching and assessment; (ii) curriculum design and course feedback; (iii) students advising teachers (and institutions) about suitable pedagogic practices; and (iv) participating in collaborative subject-based research and inquiry. Examples of successful teacher-student partnerships abound. Bryson (2016), along with teacher and student colleagues, facilitates RAISE (Advancing and Inspiring Student Engagement). RAISE, hosted in the UK, is an international network promoting partnerships for engagement. Buckley (2018) argues that such partnerships support student agency, engagement, success and democracy. But Zepke (2019) cautions that student engagement, like all higher education, works within political

constraints and the application of partnership pedagogy is only as democratic as the neoliberal state and its institutions allow.

TP (e.g. Kift, 2015) explicitly focuses on six curriculum principles that enable student success. While the other case studies do not foreground curriculum principles in the same way, they do prioritise curriculum content. For example, NSSE emphasises academic challenge (McCormick et al., 2013). L. Thomas (2012) foregrounds successful knowledge acquisition; Zepke (2017) highlights the engaging power of discipline knowledge because students enrol in courses to gain knowledge and skills that achieve life goals. Achieving these requires teaching that can satisfy simultaneously a tacit demand for content, for understanding content, for relevance and application of that content. Finding evidence for ways to engage students deeply with discipline knowledge in large classes has become a major focus for researchers (e.g. Kinsella et al., 2017; Walkington, 2015). Often found to be engaging is the ‘flipped classroom’. Planned content is made available before formal lectures so that they are freed up for questions, discussion and further investigation. Case studies exploring complex knowledge using study questions are often used. Increasingly teachers and students share the production of knowledge as collaborative outputs that are published in books, journals and research reports (e.g. Nygaard et al., 2013; Snelling et al., 2019; Taylor et al., 2012). The use of technology such as clickers, smartphones and tablets are similarly found to engage students in large classes with course content.

## Limits of Engagement: A Critique

Yes, the evidence is strong that student engagement is key to retention and success. However, its influence has limits and engagement as presented in much of the literature is not beyond criticism (McMahon & Portelli, 2012). They and others (e.g. Lawson & Lawson, 2013; Tight, 2019; Zepke, 2017) suggest that the idea of engagement occurring primarily in specific educational interfaces such as classrooms limits its key role as enabler of student retention and success. For example, some researchers (e.g. Kahu & Nelson, 2018; Kinsella et al., 2017) recognise

that student background affects engagement and that classroom learning has life-wide consequences. But for them engagement happens in the interface. This limits its ability to support retention and success. Outside factors such as money worries, dependants' needs, emotional difficulties, health problems and part-time employment influence engagement every moment a student is in the classroom. Hence student engagement, retention and success are hindered by personal, community and political circumstances unrelated to classroom experiences. While the four case studies don't exclude outside influences on engagement, they position the classroom as central to engagement and success. They largely see belonging and co-production (e.g. L. Thomas, 2012), an engaging curriculum (e.g. Kift, 2015); purposeful activity (e.g. Kuh et al., 2006) as located in classrooms and institutions. However, the New Zealand case study found that retention and engagement are influenced strongly by experiences outside the classroom. 'Too much going on in my life' was the top reason for students considering leaving early (Zepke et al., 2005).

Another factor diminishing the effect of student engagement is the influence of neoliberal policies and practices on engagement. Kuh et al. (2006) defined student engagement as a combination of student effort (agency) and institutional support (structure). Neoliberalism has tilted the balance towards structure (Kahn, 2014). In their critique of neoliberalism's impact on engagement, Macfarlane and Tomlinson (2017) identified six negative influences: performativity, marketing, infantilisation, surveillance, gamification and opposition. All, but particularly performativity and surveillance, are structural and lead to a narrow and compliant understanding of engagement managed at the meso- and macro-levels of the HE system (McMahon & Portelli, 2012). Fixed and generic engagement frameworks enable compliant students to persist, improve achievement, graduation and employment. But this diminishes their engagement by reducing learning and teaching to a technical operation leading to specified outcomes that inhibit critical learning. Teaching is packed into atomised policy frameworks based on surveys such as NSSE. According to Howie and Bagnall (2013), the enthusiasm for such frameworks suggests that their purpose is to create a normative paradigm that confirms existing ideas about student engagement, retention and success and inhibits the emergence of divergent ones.

Both critiques seem credible and persuasive. They enrich and help develop our understanding and practice of engagement. But they don't diminish student engagement's key role in retention and success. To succeed, students must engage with learning regardless of whether it is framed as occurring in a classroom or as a life-wide experience; whether it embraces neoliberalism or opposes it. For example, developing student relationships with learning, fostering students as partners in the curriculum and valuing critique and active citizenship add life-wide and life-long dimensions to engagement that can include or exclude neoliberal influence (e.g. Bovill, 2017; Buckley, 2018; Peters & Mathias, 2018; Zepke, 2017).

## Conclusion

The four case studies chosen to assess the evidence support the proposition that student engagement is key to retention and success. Many of the other engagement and retention studies consulted for this chapter to check case study findings are similarly supportive. Critiques of engagement – its interdependence with neoliberalism; its confinement to classrooms; and the lack of an agreed definition, for example – do not diminish its key role in student retention and success, whether these are understood as institutional quality performance or progress to achieving personal goals. Moreover, this finding also is common sense as it is difficult to imagine students succeeding without being engaged with their learning. However, agreeing that retention and success require student engagement does not address or resolve all the questions about this complex construct. Many questions remain. Should the influence of neoliberal ideology in learning and teaching be challenged more directly? Is there a case for constructing an alternative theoretical foundation such as critical theory? Instead of confining engagement ever more closely to the classroom, should students' life-wide and lifelong learning be a stronger influence on how engagement is understood? Of most interest to me is whether student engagement is just an appealing metaphor for effective learning and teaching and, if this is so, how will it evolve from here? This question is particularly relevant now when COVID-19 is forcing major

changes in social, political, and educational structures and cultures (Watermeyer et al., 2021). Change could include the way learning and teaching approaches to student engagement, retention, and success are understood in a post-COVID-19 world.

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# 5

## Faculty Engagement with Learning Analytics: Advancing a Student Success Culture in Higher Education

Linda Shepard, George Rehrey, and Dennis Groth

### Introduction

It seems to be a pretty good bet that anyone who is interested in improving student success in higher education will eventually find themselves using analytical data, if they are not doing so already. This is because universities have quickly moved toward the use of all types of analytical tools that function at different scales. These tools, such as locally designed dashboards or vended interfaces, are being used to inform faculty, academic advisors, and administrators about student performance at the course, curriculum and institutional levels (Sclater, 2017). According to Pelletier (2019), responses to the Educause annual survey of colleges and universities indicates that access to data about virtually every aspect of the student experience has contributed to student success becoming one of the top-ten most important issues facing higher education for several years running.

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For the most part, Learning Analytical (LA) tools are being used to make sense of all this data, and have been designed to improve the student learning experience. In addition to measuring retention, performance, and completion rates for our students, we now have the capability to predict individual student outcomes, and even to prescribe alternative choices to improve student progression. This means that, as we rapidly move toward a data-informed culture in higher education, we must be mindful of the moral and ethical implications of this work, including access to data, and most importantly, its intended use (Folkestad et al., 2019).

This chapter will provide a brief overview of the field and highlight how faculty engagement with LA is critical to its appropriate use within departments and programmes. It also provides a roadmap for how to engage faculty in the use of LA, through a top-down, bottom-up approach designed to create a sustainable data-informed culture in higher education for the purpose of improving student success.

Educational institutions that are pioneering learning analytics should be reflecting on, and sharing, the team processes and organizational structures that they are experimenting with... (Thompson et al., 2019, p. 25)

LA provides faculty with new perspectives on student performance and behaviour. The availability of data allows instructors to see beyond a classroom setting and broadens their view of the student experience. Often LA dispels anecdotal myths that faculty have been telling each other for years about their students (Rehrey et al., 2018). Such awareness provides an opportunity for faculty to rethink what they understand about our their students, teaching practices, and curricula. Once faculty have acquired these new insights, they are compelled to create course interventions or curriculum changes that can enhance student performance and help all students become more successful.

This chapter is intended for those who have an invested interest in student success, and would like to have faculty engaged in that work through the use of LA. We discuss the data infrastructure, staffing requirements and administrative support necessary to implement programmes such as our Learning Analytics Fellows Programme (Fellows). We then

close by discussing the current status of our Fellows programme and the progress faculty have made over the past five years in using LA to improve student success at the course, programme and institutional levels.

## Terminology

In the past decade there have been numerous terms used to describe data sources that can be used to better understand and improve student success. As the field has evolved and the literature about LA has grown, defining these terms has become a challenge. During the formative years of LA, Elias (2011) provided a literature review of both the origins and uses of many terms associated with LA. This included definitions for terms such as action analytics, business analytics, web analytics, and educational data mining, to name just a few. During that same time period, the 1st International Conference on Learning Analytics and Knowledge defined LA as ‘the measurement, collection, analysis and reporting of data about learners and their contexts, for purposes of understanding and optimizing learning and the environments in which it occurs’ (1st International Conference on Learning Analytics and Knowledge, 2011).

Additionally, in one of the most often cited articles, Long and Siemens (2011) differentiate between LA and academic analytics. According to them, academic analytics encompasses institutional, regional, and international level data, with primary users being administrators, funders, marketing experts, national governments and educational authorities.

But much has changed since 2011, and current uses of student analytical data has evolved, merged, and intersected in unanticipated ways. According to Sclater (2017, p. 13), ‘this rapidly evolving field may refuse to hold a permanent definition and is likely to be refined over time.’ Simply put, and for our purposes, we use the term LA to mean any and all data about learners that can be analysed and acted upon to improve student success, and has potential value for students, faculty, staff, and administrators. For the most part, the types of data typically used in our LA programme are part of the Student Information System (SIS). This data can be classified as: (1) reported data; (2) observed data that has been automatically recorded; (3) derived data that is produced from other data

and; (4) inferred data that makes correlations between datasets (Sclater, 2017).

We use the term student success to indicate that students arrive on campus prepared for college, remain in college after their freshman year, choose an appropriate major in a timely manner, and graduate within four to six years.

And we use the term faculty to denote any and all full-time instructors of record, in any programme or department, regardless of their rank or appointment or the expertise in working with big data.

## Macro and Micro-Metrics

Universities are adopting a variety of strategies for using big data to understand student academic experiences and thereby improve student success. Vended products offer large-scale support for institutional level problems. And while results are often enviable, even companies like Civitas recognise that they ‘don’t have all of the answers. There’s a lot of work to be done as data initiatives get underway. What we can do is help institutions interested in the big questions start to get the answers their data can provide by strategically employing insight and action analytics’ (*The Mission of Civitas Learning*, 2020).

Technological and methodological advances have enabled unprecedented capability for decision making based on big data (Dede et al., 2016)

Many large-scale vended products focus on macro-level institutional problems, where an outcome of interest is predicting risk and then developing interventions to mitigate risk. For instance, students predicted to drop out of the institution are offered a second chance by taking a course that helps them develop a fuller understanding of the campus support offices or learn new study skills. While the macro level of inquiry is important, predicting retention to the campus or graduation in a timely manner, we suggest that there remain many nuanced barriers to a student’s success hidden within a programme, a curriculum or a course. For a student to achieve macro goals of degree attainment, the student must

accumulate many micro-successes, such as selecting an appropriate major, registering for courses in a meaningful sequence, and adequately preparing for successful completion of major course sequences. The culmination of success on many of our micro-metrics will then move our campus level measure of success, including retaining and graduating more students. By understanding the numerous micro-metrics of success, we are also able to continue to help more students and create a data-informed culture of continuous evaluation and improvement across many sectors of the campus.

## Faculty Perspective

This micro-level of inquiry may be more contextual because of specific issues within a discipline or programme. Students can encounter curriculum roadblocks because they need a required grade in specific course. Or, perhaps the students need to gain proficiency in important threshold concepts within a given discipline (Land & Meyer, 2003) because knowledge of those concepts will be called upon in a subsequent downstream course in a curriculum. It is here that our programme turns to faculty. Faculty are knowledgeable about their programmes, the content of their courses, the rationale for the sequencing of content and courses, as well as invested participants in helping students be successful in school, graduate, and gain meaningful careers. For this level of work, we suggest that faculty involvement in LA is a natural fit. Faculty are concerned about the success of their students, are knowledgeable about academic programmes and are well equipped to develop lines of inquiry to answer critical questions about student success.

LA has changed the way we think about our students (LA Fellow personal communication, January 16, 2020)

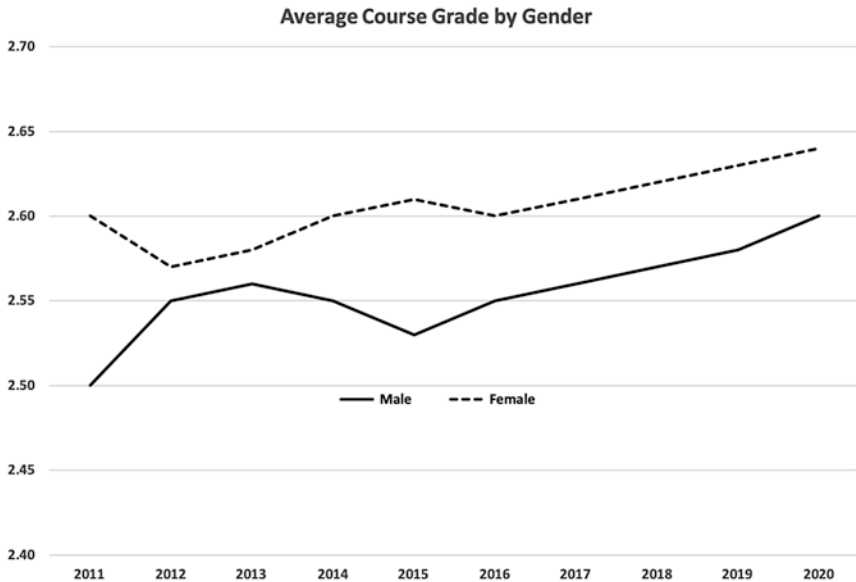
Engaging faculty in the broader perspective of student success requires a shift from business as usual, where faculty are provided very little quantitative knowledge about the student experience beyond what happens in their course. Generally speaking, faculty are limited to only seeing



information about students in their class. They may have a narrow understanding of the overall trends for students in their programmes and very little awareness of what happens before or after students complete their course. This is understandable at a research-intensive institution, where faculty may teach only one undergraduate class per year, often large. Faculty at the upper level may be responsible for smaller classes, but are not likely to have the full view of the paths that current and potential students take through the curriculum. In considering student success, these faculty only see students who have successfully navigated through the curriculum to be upperclassmen.

Students enter a course from very different backgrounds, data rarely shared with the faculty. Some students enter the course never having had any relevant experience with the discipline, while others may have a rich background of the subject. Each faculty member predominantly sees only their classes and, while they understand how their classes are situated in the curriculum, they lack access to information regarding student performance in prerequisite and subsequent courses. What we aspire for the Fellows programme is a broader perspective, connecting faculty to the student experience at the course, programme, institutional and career levels; all aspects of the student life cycle. We have found that when faculty are made aware of trends in their programmes or patterns in their courses they engage in exploration and begin to formulate lines of inquiry to more fully understand student success. The following datasets illustrate some of the simple trends that have engaged our Fellows as they conduct scholarly student success research.

Figures 5.1 and 5.2 below show examples of what performance trends might look like at the course, department or campus levels. Each line represents a subgroup (e.g. male compared to female) of students for comparison purposes. In this example, the comparison suggests that females have a slightly higher GPA average compared to males (Fig. 5.1). Another view (Fig. 5.2) shows that males have a higher Drop, Failure and Withdrawal (DFW) rate than females. In a similar way faculty can compare the performance of first-generation students and non-first-generation students, or students from lower socio-economic backgrounds (SES) to higher SES students, under-represented minority (URM) students compared to non-URM students, and international students compared to



**Fig. 5.1** An example of an average course grade disparity by gender

domestic students. And for a deeper dive faculty can explore the intersectionality of these categories (e.g. female first-gen students).

In the past, faculty were rarely, if ever, afforded the opportunity to gain this broader perspective. So, while these datasets pique the curiosity of our faculty, it is here that their engagement in inquiry begins. This requires sufficient access to institutional data so that they can explore and make informed changes or create informed dialogue about their courses or within their programmes. They can then put their actions to the test and determine the effectiveness of those actions.

Other concerns that many Fellows find relevant to their inquiry include datasets about a student's selection of a major, a student's transition to a new major, and a student's academic readiness to be enrolled in a specific course. Six years ago, we started providing faculty datasets that had been originally prepared for institutional-level audiences. Over time these datasets were modified to respond more specifically to the student issues that concern faculty. The faculty perspective became broader, and the administrative perspective became more sensitive to the faculty view.

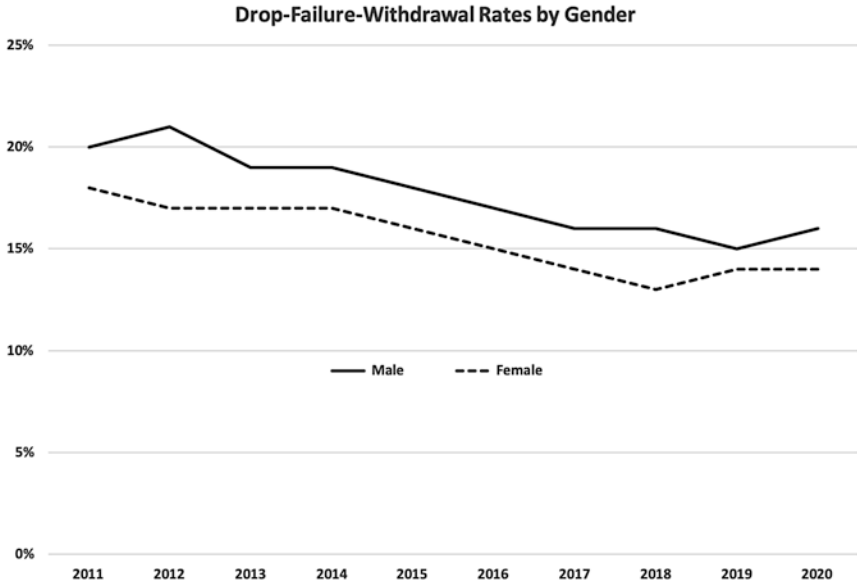


Fig. 5.2 An example of drop, failure and withdrawal rates by gender

In this give-and-take process both faculty and campus information sources were enriched.

It is within the faculty-driven process of inquiry that the Fellows begin to take ownership of student success within their programmes. Thus far we have discovered that research results about these micro-milestones empower faculty to explore and more fully understand the graduation pathways of their students.

## Datasets

In this section we will describe the datasets that were developed for faculty projects and how these data tie into institutional goals of advancing a data-informed culture. While we could have created one data set for each Fellows project, our strategy was to build a sustainable data environment where faculty can return and update their knowledge and use the datasets continually and for multiple purposes. Faculty become

knowledgeable about the types of data available and then can independently explore a wide range of questions that impact institutional effectiveness or student success. Thus, the datasets are becoming more stable year after year, so Fellows can return to them and rely on their previous knowledge about the sources.

Over the six years of this project, recurring research themes have emerged that are relevant across the various disciplines. These questions focus on one or more intersecting variables which most often include demographics, gender, ethnicity, financial status, and first-generation college student status. All projects share interests in various segments of the student life-cycle, with questions like:

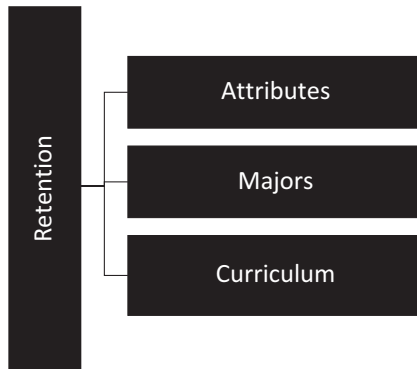
- How did students perform on their placement tests?
- What are each student's academic interests?
- How well did students perform in upstream or downstream courses?
- Do students continue to create course schedules that steer them toward their academic pursuits?
- How does a student's performance each semester inform their next semester's schedule? Do students stay on their current path or do they adjust or change directions completely?
- When and why do students withdraw from courses or leave the institution entirely?

Over the duration of our Fellows programme we have discovered four datasets that generally meet the needs of our Fellows' projects. These datasets capture retention, student attributes, choice of major(s), and movement through the curriculum (Table 5.1). The **Student Retention Set** is at the core of the datasets and tracks longitudinal data for incoming cohorts beginning in 2006 to the present, excluding the current term (Fig. 5.3).

The retention dataset tracks the academic status for each student each semester that the student is enrolled, has received a degree or has dropped out of the institution. This longitudinal data provides the student status across six years. There is one record per degree-seeking undergraduate student (beginners, intercampus transfers and transfers) per term. In any

**Table 5.1** The four datasets available for faculty-driven research about student success

Datasets		
<b>Student Retention</b>	Tracks students for six years, from entry term to graduation.	Student status as enrolled, graduated, or dropped.
<b>Student attributes</b>	Provides demographic data for each student in the cohort.	Student demographics such as ethnicity, gender, SES, high school GPA.
<b>Student major(s)</b>	Tracks the declared major(s) for each student for each term.	Choice and change of majors, graduation pathways.
<b>Student curriculum</b>	Captures the academic course transcript of each student each term, includes pre-college courses.	One record per student per term per course. Includes course information, course grade and term.



**Fig. 5.3** The core of our datasets is retention data

given year, Fellows have the opportunity to study approximately 110,000 individual students and 5 million student records.

The **Student Attribute Set** contains one record for each student in the cohort. A selection of time invariant attributes is collected for each student about academic preparation (e.g. HS GPA, SAT score) or demographic data (e.g. gender, ethnicity, age, residency). The **Student Major Set** provides a term-by-term snapshot of a student’s choice of major. This allows for exploration of transitions and choice. The **Student Curriculum Set** provides all of the coursework on a student’s record – essentially the

transcript of coursework. This includes credit gained through testing or transferring courses. All files are easily joined together by student identifier and by term if applicable, creating a suite of easily accessible data that can address most of the questions faculty may have about their students.

Other data (Adhoc Data) may be joined to these core datasets depending on the faculty project; for instance, data collected in their course from a quiz or a survey may be joined to this data core.

## Data Access

In post-secondary education in the US, provisioning institutional data to faculty members is not a common practice, particularly with federal laws (e.g. Family Educational Rights and Privacy Act (FERPA)) governing the use of student records. Many LA researchers note that data access poses a significant obstacle in higher education (Dede et al., 2016). Much work remains in this area both in terms of provisioning and ethical use of data and results. Our approach to provisioning student data meets the following criteria. Each Fellows' project must:

- link to the institutional mission of improving student success and institutional effectiveness
- include a letter of support from the Dean/Chair of the faculty member's home department
- be reviewed by the Vice Provost for Undergraduate Education in order establish that all Fellows are acting as *university officials* doing work for institutional improvement on behalf of the institution
- comply with data steward's student records requirements (FERPA training and data use consent).

Furthermore, each member of the Fellow's research who handles student data must be approved by the Internal Review Board, which certifies that they can conduct and publish their scholarly research about student success.

## Resources and Staffing

Faculty from any discipline and any rank can submit a proposal to participate in the Fellows programme, as long as they plan to use Student Information Systems data to formulate their projects. Each Fellows project includes one or more faculty researchers (Fellows), a facilitator with educational development expertise, and at least one data analyst. In our case the Bloomington Assessment and Research office (BAR) provides the data expertise needed for each project. Additionally, all projects have administrative support from the Vice Provost for Undergraduate Education (VPUE) as well as the Director of the Center for Learning Analytics and Student Success (CLASS) (Fig. 5.4). The purpose of CLASS is to advance a data-informed culture across all aspects of our campus. CLASS facilitates faculty use of LA by providing programme leadership, offering financial support for faculty research projects, and ensuring faculty projects align with campus interests and the strategic plan.

CLASS also provides organisational and logistical support for all aspects of the Fellows programme and recruits new Fellows each year. Synergies among existing Fellows are encouraged as well as the administrative tasks of coordinating the Call for Proposals, selecting proposals, and facilitating the projects with embedded educational expertise.

The Bloomington Assessment and Research (BAR) office supports these projects by developing datasets and visualisations that inspire faculty interest, as well as providing all aspects of data support. BAR provides input during the proposal selection process, ensures availability of required datasets, shares information sources relevant to the topic, and offers statistical research expertise as required for each project. Each BAR staff member has skill in information architecture, expertise in data visualisations, and knowledge of qualitative and/or quantitative research methodology tools and techniques.

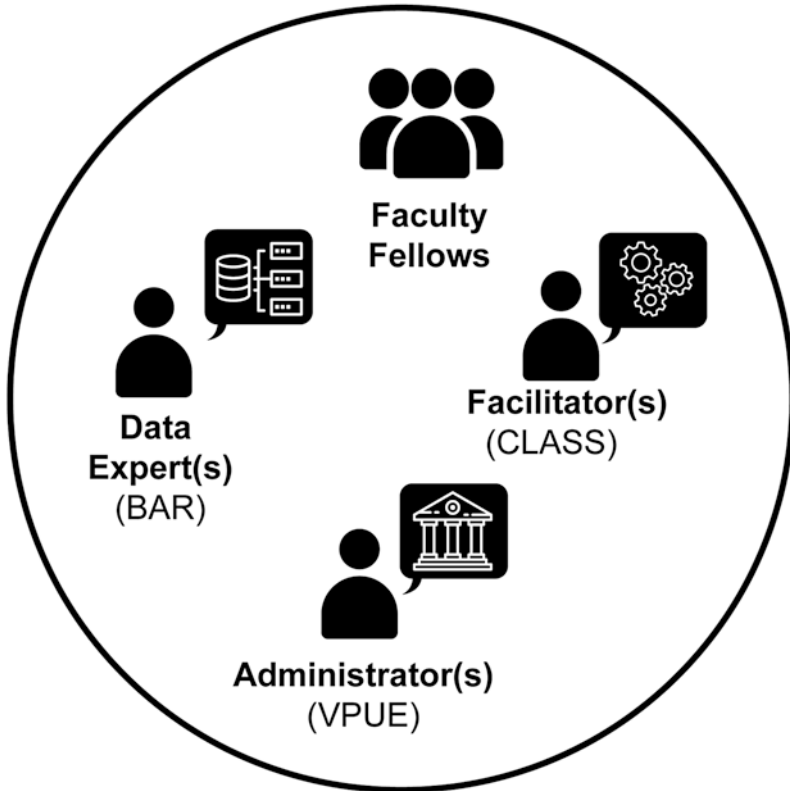


Fig. 5.4 Components of the learning analytics fellows programme

## Scaffold Change Strategy

According to the Association of American Universities (Association of American Universities, 2017), approximately five to seven years are needed to create a sustained change in higher education. Our scaffold *Awareness to Actions Framework* (Fig. 5.5) (Molinaro, 2018) considers this time frame and the complex learning curve Fellows experience once they begin to work with analytical data. For some of our Fellows, this may be the first time they have ever worked with datasets that are this large. For others, depending on their disciplinary expertise, this may be



**Scaffold Approach:  
The Faculty Perspective**

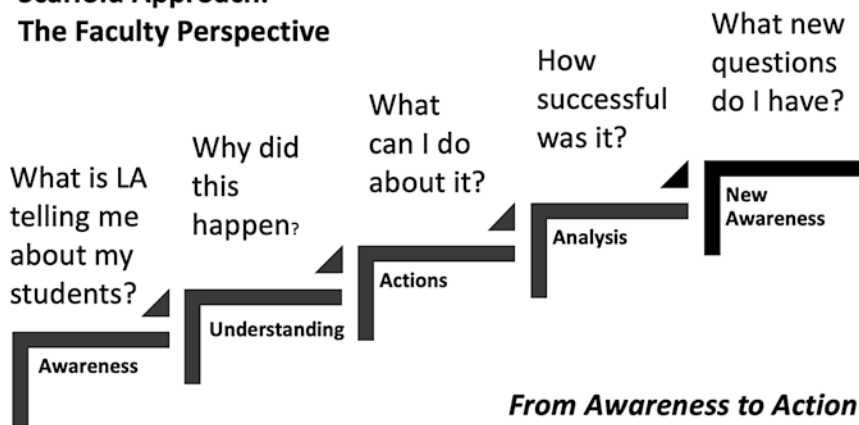


Fig. 5.5 The awareness to actions framework. (Modified and adopted from Molinaro’s (2018) Cycle of Progress for Sustainable Change)

the very first time they have ever used quantitative data in their scholarly research.

Regardless of their quantitative and expertise large datasets, all Fellows begin by using data to uncover what is actually taking place in their courses or curriculum. For many, this is the first time they have ever considered how their role as a teacher influences student success beyond their classroom. The next step in the model is for each Fellow to determine the reasons behind what has been uncovered in the data. Once Fellows understand why students are behaving in a certain manner, they can act, creating course interventions or making changes to the curriculum accordingly (Fig. 5.5).

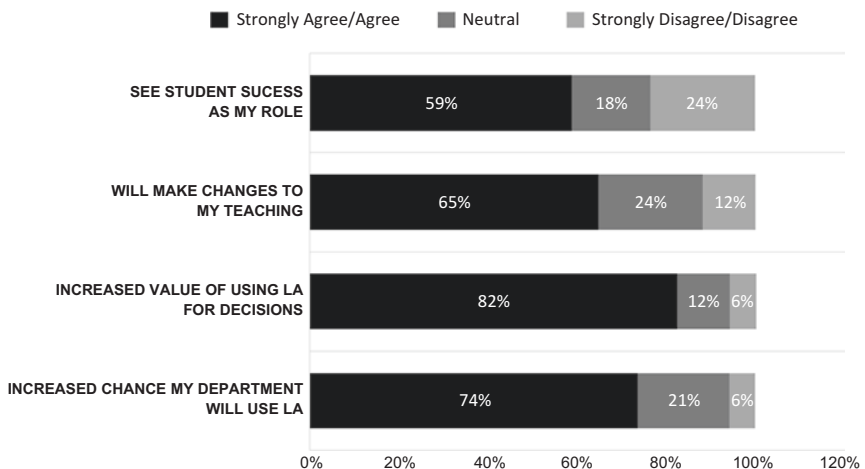
Fellows can then use LA to determine how effective the intervention(s) has been in improving student success. This analysis and reflection of the intervention fosters new awareness, and the process begins again, but at a much more sophisticated and more informed level.

## Cultural Change Indicators

We have discussed in various ways the assessment of our Fellows programme in several other papers and how we are measuring cultural change on our campus (Rehrey et al., 2019b; Rehrey et al., 2020a, 2020b). As of the writing of this chapter, 56 faculty members from 25 different programmes have conducted 66 unique research projects since 2016. To date, 6 published papers, 29 conference presentations, and 63 conference posters have been presented both locally and on the national level by or about the Fellows. A searchable database of all the Fellows' projects can be found at <https://class.indiana.edu/publications/index.html>.

At this stage of our programme we have been measuring faculty attitudes, beliefs, and behaviours that must undergo a paradigm shift for our programme to have impact upon the teaching and learning culture in each programme. We are relying primarily on faculty self-reported surveys to determine if participation in the Fellows programme has increased faculty ownership of student success and helped to establish a data-informed culture (Table 5.2). The response rate per project for our most recent survey was 90.5% (Rehrey et al., 2019a).

**Table 5.2** Results from the LA fellows survey



... I think that there is a steady cultural change about how the faculty had been affected by the work, such as attitudes or beliefs about student success or even changes going on thanks to the availability of this data and so it is definitely having an effect (LA Fellow, personal communication, September 12, 2018)

Survey results indicated that 82% of the respondents saw an increased value in using LA for the purpose of improving student success, with 59% indicating that their role in student success had increased. Additionally, 65% indicated that they planned to make changes to their courses based upon their LA projects. Of great importance to us was the fact that 74% of the respondents indicated that there was an increased likelihood that their department would begin to use LA when making decisions (Rehrey et al., 2019a, 2019b).

## Future Directions

At this stage of the Fellows programme most participants are either at the awareness or understanding phase of our model. Because 26 faculty have continued to participate in the Fellows programme for multiple years, we anticipate actions will be taken to improve student success based upon project reports.

... I saw myself as a scholar or a researcher as part of my job here, and that was a real gift to have a new understanding of the value of what we're doing here (LA Fellow, personal communication, September 12, 2018)

Additionally, one of our programme outcomes is to have at least one faculty member from each academic programme on our campus use LA to conduct scholarly research about student success. To that end, we are formulating a more systematic recruitment process to ensure we can achieve this outcome.

Another outcome is to reach the data-informed tipping point within individual academic programmes. For example, five faculty from our Economics programme have been Fellows for multiple years. Insights

from those projects continue to influence the conversations about student performance and retention in multiple courses within the programme.

We are also seeking external funding to expand our programme, and programmes like ours, throughout the US. In February 2019, a group of Learning Analytics Fellows received a ‘mini-grant’ from the Association of American Universities – \$20,000 over two years – to help improve undergraduate education outcomes in Science, Technology, Engineering and Mathematics (STEM) disciplines. Indiana University’s project, ‘Advancing a Data-Informed STEM Culture: The Mitigating Grade Surprise Collaborative’, expands upon existing campus efforts to transform teaching and learning cultures in STEM departments using learning analytics and big data.

With support from the grant, Indiana University faculty from six different STEM programmes will develop, implement and assess teaching strategies and active learning interventions designed to address the impact of ‘grade surprise’ – the difference between a student’s expected grade and their actual grade in a course. Faculty from Anthropology, Biology, Computer Science, Chemistry, Informatics and Maths are participating in this project.

## Conclusion

In this chapter we have discussed how faculty involvement with LA can help to shape student success initiatives in higher education. We have provided a detailed account of how a Learning Analytics Fellows programme is a viable approach for establishing a sustainable, data-informed culture that can be instrumental in bringing faculty into the student success conversation. We have shared an implementation strategy that thus far has proven successful, how important the faculty perspective is to student success, and the types of data structures required to support faculty scholarship of student success. We also discussed how we are measuring cultural change indicators in order to determine the impact of the Fellows programme and the future directions the programme will take.

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# 6

## Institutional Leadership Efforts Driving Student Retention and Success: A Case Study of the University of KwaZulu-Natal, South Africa

Sadhana Manik and Labby Ramrathan

### Introduction

Student access and their success in higher education in terms of retention, progression and graduation are amongst the key drivers of higher education transformation within South Africa. Student access is understood to be linked to the tangible increase in the student population of previously disenfranchised population groups in South Africa (SA) and student success is ‘students’ persistence at the institution and their achievement of degree completion’ (Manik, 2015, p. 102). For this chapter, we concentrate our discussion on the retention and success of undergraduate students in public higher education in SA. As is widely published, the ills of apartheid in SA have penetrated the fabric of educational, political and socio-economic spaces (Chetty & Vigar-Ellis, 2012; Kallaway, 1984; McKeever, 2017; Rakometsi, 2008). Since democracy, the country

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has been constantly undergoing transformation – socially, economically and educationally – in attempts to overcome the past imbalances.

## Changes in Higher Education

Higher education, being an important sector within the country for social, economic and political transformation, is informed by a National Government Act (namely Education White Paper 3 – A Programme for Higher Education Transformation of 1997) to drive its transformational agenda (South African Department of Education, 1997) and this act has paved the way for colossal changes to the higher education system (Soudien, 2010). These articulated changes in the policy statement are as follows:

- Promot(ing) equity of access and fair chances of success to all, ... while eradicating all forms of unfair discrimination and advancing redress for past inequities.
- Meet(ing), through well-planned and coordinated teaching, learning and research programmes, national development needs ... [for] a growing economy operating in a global environment.
- Support(ing) a democratic ethos and culture of human rights....
- Contribut(ing) to the advancement of all forms of knowledge and scholarship, and in particular address(ing) the diverse problems and demands of the local, national, southern African contexts and uphold(ing) rigorous standards of academic quality.” (South Africa Department of Education, 1997, p. 14)

Key to the transformation agenda as espoused in White Paper 3 (above) was the need to change the demographics of South Africa’s student population with several interventions to widen access and to increase the participation of disadvantaged groups in higher education (Manik & Ramrathan, 2018). In this regard, the racial profiles of students accessing higher education was critical in increasing the participation of students from marginalised communities (Ramrathan, 2019), thereby attempting to widen access to include particular students. The population of



students accessing higher education has now increased exponentially (CHE, 2013a, 2013b) and the majority of students registered across public higher education institutions were Black African students who constituted 81% of a total of 938,200 students in 2011 (MacGregor, 2014). We agree with the contention by Lewin and Mawoyo (2014, p. 10) that the variables that influence 'access and success at university are complex and multi-dimensional'. Therefore, while it may be argued that the goals of White Paper 3 (South Africa Department of Education, 1997), in terms of changing the demographics of the student population, have been met with success (as was claimed by Badat, the Chairperson of Higher Education South Africa (HESA)), universities have been dogged by several challenges related to retaining students and degree completion.

This brief background to the South African higher education sector sets the scene for the rest of the chapter wherein the challenges that higher education institutions are facing in terms of student progression within their study programmes will be presented followed by a short biography of the case study institution. The chapter ends by presenting an account of how the case study institution, through its structural leadership, is attempting to address an array of complementary issues in supporting students to achieve academic success in their programmes with a special emphasis on teaching and learning supported by research-led initiatives. Some of the evidence for this chapter has been produced through an ongoing institutional case study on student access, progression and drop-out being conducted at the university.

## **Challenges Experienced by Higher Education Institutions in Relation to Student Retention and Progression**

As alluded to earlier, White Paper 3 – *A programme for higher education transformation* (South Africa Department of Education, 1997), set the platform for institutional change. Initially commencing with increasing the participation of Black African students and curriculum

transformation, these two aspects of transformation continue to inform changes and challenges in higher education within South Africa.

Several publications (e.g. Council on Higher Education [CHE], 2013a, 2013b; Letseka & Maile, 2008; Manik & Ramathan, 2018; Ramathan & Pillay, 2015) have averred that while enrolment targets in terms of the population demographics have been achieved overall within higher education (but not necessarily in each of the higher education institutions due to historical privileges of universities) there are still enormous challenges of access. These challenges were numerous and they included, amongst others: access to higher education by potential students from previously disadvantaged communities; poor schooling that excluded potential students from accessing programmes of their choice; and an expansion of higher education to cater for the increased enrolment numbers together with greater demand for student housing, support services offered by universities and access to digital technology, including wifi connectivity (Manik & Ramathan, 2018).

## Physical and Epistemological Access

As noted globally and locally, students' success is linked to the phenomena of student dropout, progression and graduation rates which have become an area of concern. Despite interventions over decades, limited progress has been made in addressing this concern. In South Africa, the dropout rate is perceived as high with approximately one third of the students dropping out in their first year of study (CHE, 2013a, 2013b). Thus one of the key discourses on undergraduate students in public HEIs has consistently been that of dropout rates, with Higher Education South Africa (HESA) and researchers red-flagging it as an area of grave concern with some institutional dropout rates being 35% and a majority (55%) of higher education students never reaching graduation (Badat, 2014; Beck; 2011; Manik, 2015). Locally, Prinsloo (2009, p. 18) argued that student retention is a phenomenon which is the consequence of any one of three categories operating at different stages: individual (personal reasons), 'institutional (quality of advice, guidance and general quality of provision)... and supra-institutional (finance and other socio-economic

factors).’ Several studies have indicated that in some cases there are singular reasons but, frequently, there are multiple reasons across more than one of the above-mentioned stages, which are responsible for student drop out (Lewin & Mawoyo, 2014; Manik, 2014; REAP, 2008).

An associated area of institutional anxiety which mars discussions on students’ success rates has been that of low progression and graduation rates (CHE, 2013a, 2013b; Lewin & Mawoyo, 2014) with statistics revealing a shocking 27% of all undergraduates who graduate in the minimum time for degree completion. Additional statistics revealed that approximately 50% of students graduated within the minimum period + two years of study in their respective programmes (CHE, 2013a, 2013b) and the latest statistics now show that the majority of students are taking six years to complete a three year degree (South Africa’s Education Statistics, 2019). These statistics are despite institutional attempts to improve throughput rates.

Several factors have been identified as reasons for the low progression and high dropout rates (Manik, 2014; Sosibo & Katiya, 2015), including institutional issues of language of instruction, classroom experiences, assessment and access to resources; access issues in terms of readiness for higher education (articulation gap) through their school education, programme choice based on selection criteria and programme design issues (e.g. pre-requisites and co-requisites in the programme design); and personal issues including illness, family support, relationship issues, financial issues and accommodation. Despite the above, although there can be initial acceptance at an institution for students, continued access for disadvantaged students is not guaranteed for the duration of their degree. This has been evident with repeated student uprisings at several institutions in the past few years (including the case study institution of UKZN) as a result of historical debt accumulated by marginalised groups who are unable to register for a new year of study given that they have not paid their previous year’s study fees (later on we explore this further). Epistemological access (Boughey, 2005; Dhunpath & Vithal, 2012; Maphosa et al., 2014) has also dominated, becoming a cause for institutional anxiety as student retention and timely graduation is critical in accessing public university funding. First Generation students, who are predominantly Black African, are identified as an ‘at risk’ group. Reports

reveal that ‘historically disadvantaged students’ who are considered an ‘at risk’ group are not graduating in the minimum time although they have financial support through several funding avenues, such as National Student Financial Aid Scheme (NSFAS) (Govender, 2013; Heymann & Carolissen, 2011). Manik (2015, p. 230) did earlier argue from an institutional study (UKZN) that ‘measures to financially support students are insufficient in propelling them to achieve success and that additional measures need to be institutionalized, factoring in the impact of educational history.’ Indeed, funding does play a critical role for institutions and students.

## Institutional and Student Funding

Clearly the attempts to increase access and widen participation in higher education means that institutions would have to put in place structures and processes to support students as they progress through their studies to ensure timeous completion. This support is not just about a transformational or social imperative. There are economic issues that have the potential to weaken the university. The funding model for higher education in South Africa has, as one of its parameters, student progression through their degree within the block grant funding tool that universities receive from the state (Ministerial Statement on University Funding: 2019/2020 and 2020/2021, 2018). This means that while institutions may widen participation in higher education, their survival financially is also dependent upon students’ progression in their study programme. Student fees have developed into a major issue within the South African context, erupting in major student protests (Habib, 2019) with students demanding fee-free higher education. This demand by the students erupted after the former President Jacob Zuma, towards the end of his term of office, announced fee-free higher education to students who come from economically poor backgrounds (Areff & Spies, 2017). A block grant within the national higher education budget has been set aside to financially support such students within a family financial threshold benchmark (family income that is less than R300 000–00 per annum) (Ministerial Statement on University Funding, 2018). While this reprieve

for students from disadvantaged backgrounds has been welcomed by the students, there are severe implications for universities as these financial aids come with conditions linked to students' academic success. When students fail some modules within the curriculum of their programme, they are then required to pay the institution with their own funds for repeating the failed modules. The inability of students to fund these failed modules has led to students accumulating extensive debts at the university.

The nationwide student protest in 2015 and 2016 was the most severe since democracy that commenced with a demand for a 'no fee increase' and it culminated in a web of demands ranging from the removal of senior leadership in some higher education institutions, to access to higher education by the poor and marginalised, to fee-free higher education studies. In addition, all public higher education institutions have a three-year rolling plan on admissions and their subsidy is capped based on these rolling enrolment plans. Hence their subsidies from the state is heavily impacted by access, throughput and graduation rates of its enrolled students. Curricula at institutions are an important facet of the discussion on students' success (Ramathan, 2016). The curriculum implications relate to students who stay longer in the institution and the repercussion of this is that limited new students can be enrolled within a programme. Thus, in high demand programmes, there are limited spaces available due to student blockages which result from low throughput rates and graduation rates.

Another feature is the decolonisation of higher education curricula and the removal of all symbols representing colonial influences (e.g. the #Rhodesmustfall movement of 2015<sup>1</sup>) which spread to other institutions that had statues and other artefacts of colonial history (Habib, 2019). The most recent violent student protests of 2020 currently unfolding within the South African higher education context is related to students demanding that their historical debt be cancelled and that they are registered despite these historical debts, as stated above (Masweneng, 2020). The result is that institutions in this position need structures and processes to manage student throughput to allow for academic success that

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<sup>1</sup> For example, to remove Cecil Rhodes' statue from the University of Cape Town campus.

will minimise the impact of financial instability arising from the reduced income through student fees.

## Decolonising the Curriculum

Currently all higher education institutions are required to transform their curricula offerings to address issues of decolonisation (Chisholm, 2019; Le Grange, 2016). Hendricks (2018) argues that there are several challenges that abound which impede decolonising curricula in SA higher education. A key challenge to the decolonisation project stems from lecturers themselves and leaders such as deans who are expected to ensure that there is implementation of a decolonised curriculum but whose own education was centred in curricula that were Eurocentric in nature and thus colonial epistemologies were foregrounded (Paraskeva, 2011).

Another challenge articulated by Fomunyam and Teferra (2017) is the language of instruction at institutions of higher learning which was identified as a hurdle to decolonisation. A tangible effect of the current medium of instruction at HEIs was its negative impact on particular populations of students (whose home language is different) hindering them from achieving success (Jama et al., 2008; Maphosa et al., 2014; REAP, 2008). For example, the 'underpreparedness' of students, first years (Jama et al., 2008) and others (Sosibo & Katiya, 2015), was linked to the English language with students struggling to acquire skills proficiency in academia. Research has revealed that attempting to incorporate indigenous languages into university for the purposes of teaching and learning is a challenge (Makhubele et al., 2018; Mkhize, 2018). The implications of high dropout, low progression and low graduation rates, besides the social, economic, political and transformation impacts, has financial and programmatic implications for higher education institutions. All public funded higher education institutions rely quite heavily on funding from the state in terms of state subsidy. The state subsidy is based on a funding model that includes registration and throughput as parameters in its calculation of the subsidy given to universities. Slow completion rates at institutions, as was evident in 2019 and previously,

impact negatively on institutions (South Africa's Education statistics, 2019).

## **Programme Offerings and Preparation for the Twenty-First Century**

A noted uneasiness persisting in relation to curriculum is that of gateway subjects, threshold subjects and threshold concepts (Meyer, 2008). Access to some programmes require students to have gained a minimum pass level for admission. Most common of these gateway subjects are Mathematics, English and selected Natural Sciences subjects, such as Physical Sciences and Life Sciences. Selection into these programmes of study are guided by minimum requirements and selection criteria. Minimum requirements comprise requirements that form the basis for an application into a programme of choice and these requirements are approved at the university level and at the South African National Qualification Framework level. The selection criteria are more locally determined and usually based on historical patterns of perceived and researched elements to enable success in a programme. The selection criteria can change depending on the historical interest in a programme. If a student does not qualify based on the selection criteria, they may be asked to take a foundation programme, an extended programme or an access programme, which are usually offered by the institution. Hence, in addition to offering and managing mainstream programmes, institutions are required to offer and manage these extended access programmes which are routes of entry into the general degree.

Threshold subjects and threshold content have been identified as barriers to progression within a programme (or content within a module) (Meyer, 2008). Threshold subjects have largely been identified as those subjects that are either pre-requisites or co-requisites within a programme design. There are also other subjects that students within a programme design may find difficult to pass and ultimately this can hold them back from progressing within a designed programme. Noting these threshold subjects (and content), several interventions have been put in place across institutions to support students in developing mastery over the subject

(or content). These interventions include, amongst others, tutor support within disciplines, short video recordings explaining these threshold concepts for students to access at any time, additional sessions with lecturers, mentor support and peer support. The challenges associated with curriculum issues related to student throughput also include academic support services by Academic Development Officers who are largely employed on a limited duration contract and the nature of support is at times dependent upon who provides the support (Ramrathan & Pillay, 2015).

More recently, due to the global economic downturn and the focus on the fourth industrial revolution (4IR), the growing rate of unemployment has become a grave concern for higher education (Menon & Castrillon, 2019). The lack of employment for graduates has raised questions about the kind of curriculum offered by higher education institutions and there is debate on whether the attributes of graduates are sufficient to meet the needs of the rapidly changing world of work. Two specific concerns are picked up within this challenge. The first is that the higher education curriculum does not meet the rapidly changing needs of industry, including the emergence of the 4IR skills and competences which are needed to drive an ever-changing work environment. The global pandemic of COVID-19, which took a foothold from March 2020 onwards, also presented public higher education institutions with an enormous hurdle to suddenly navigate. Institutions were forced to prematurely close and explore remote teaching options away from the normative multimodal approaches (due to lockdown and social distancing imperatives) to curb the spread of the novel coronavirus.

Noting the enormous challenges that higher education institutions within South Africa are faced with, and the web of complexity surrounding these challenges, leadership and leadership structures have become the central drivers in charting a way forward and effectively managing the support systems which are required to sustain an adequate functioning higher education system (systemically as well as institutionally). In a paper, Manik (2015, p. 239) argues that, given the complexities of each HEI, 'discussions on access and success have to also be carved according to the uniqueness of each case study institution'. The rest of this chapter, therefore, presents a case example of how student access and progress is managed through a leadership perspective against this backdrop of the



current challenges in higher education as the case study institution continues to address the negative legacy of its historical past, whilst keeping abreast of global trends by demonstrating local relevance through its structures, processes and programme offerings.

## **Biography of the Case Study Higher Education Institution**

The University of KwaZulu-Natal was formed in 2004 from the merger of two historically-initiated universities. The merging universities were the University of Durban-Westville (historically non-white student population) and the University of Natal Westville (historically white student population), both located within the Province of KwaZulu-Natal. As expected within the structural organisation of apartheid, the former University of Durban-Westville received lower subsidies from the state and it was not able to attract massive private funding to sustain and grow itself to keep up with the demands of higher education. The former University of Natal, on the other hand, had immense financial support both privately and from the state to ensure and sustain a high image of a leading university in South Africa. Since 1994, the transformation of higher education to bring about social equity and redress of the historical past resulted in several initiatives. One such initiative was the re-landscaping of higher education which took place under the watchful eye of the then Minister of Education, Kader Ismail. In the re-landscaping of higher education across the country, some institutions remained unchanged, some were merged and some were unbundled in terms of their campuses and re-assigned to other universities. With the merging of the University of Durban-Westville and the University of Natal to form the University of KwaZulu-Natal, the traditional race groups that attended the former universities had, over time, changed substantially, with an increasing number of Black African students accessing both of these former universities. Currently, the student population of the University of KwaZulu-Natal is approximately 45,000 students registered across all of its now five campuses and across undergraduate and

postgraduate students. The student population is quite diverse, although the vast majority are Black Africans and many students are from disadvantaged backgrounds, socially and financially. 'First year entrants from non-fee paying schools (quintiles 1, 2 and 3) peaked in 2016 at 42% compared to 26% in 2010' (UKZN AMS, 2017, p. 05). This is not unusual as poverty and unemployment are rife in KZN province (Jacobs et al., 2009). The national poverty ranking of SA schools (quintiles) and learners are based on a policy of norms and standards for schooling where quintile 1 ranked schools are categorised as the schools located within the poorest part of the community with very meagre school infrastructure to support effective teaching and learning (South African School's Act: National Norms and Standards for School Funding, 1998). Quintile 5 category schools, on the other hand, are schools located in more wealthy communities and with better infrastructure to support teaching and learning. Thus, many UKZN students do have financial support through the National Student Financial Aid System, a government supported financial system to support students from less economically able families. In 2016, an alarming '48% of students had NSFAS funding. An overall profile of the 2016 cohort admitted into UG studies at UKZN shows that of the 7973 new students enrolled in bachelor degrees: 79% are African and 57% are female' (UKZN AMS, 2017, p. 05). The Rural Education Action Programme (REAP) (2008) linked rurality and poverty to first generation students and learning in a language which is not their first language as being key variables in determining their success at university. The impact of COVID-19 is a new variable as the majority of rural areas do not have access to electricity and the necessary infrastructure to support wifi however institutions continued their academic program from June 2020 via online platforms.

In terms of the University of KwaZulu-Natal's five campuses, offerings are largely face-to-face programmes across most fields of study, including medicine, health sciences programmes, engineering, education, social sciences, law and management. All five campuses are urban based in relatively close proximity, with the exception of one of its campuses, which is located approximately 100 km away from the headquarters of the university. This campus is also urban based and it is located in the capital city of the province of KwaZulu-Natal. The university is amongst the top five

universities within the country and it is premised on a research-led mission. Hence, its research standings are usually in the top three of the country. The university is also located within the 500 to 600 world ranking scale (UKZN Press release, 2019) and, according to the UKZN AMS Report (2017), ‘in 2016, voluntary dropouts have dropped to 6% (in 2013, it was 11%) and graduation rates have plateaued at 18%’ (p. 05).

## The College Model at UKZN

The University is managed through a college model system (with the head of the institution occupying a Vice Chancellor position) comprising four colleges, each headed by a Deputy Vice Chancellor (DVC) and a Head of College. Within each college there are up to a maximum of six schools and each school is headed by a Dean of the School. Within each school there are several clusters made up of different disciplines of study. The clusters are led by Cluster Leaders and some larger clusters have the added recent benefit of the tier of Deputy Cluster Leaders (an introduction in 2020). Within each college there is a Dean of Teaching and Learning who oversees the teaching and learning aspects of programme delivery. Within each school there is a Teaching and Learning Academic Leader who directs the affairs of teaching and learning within the school. Decision making for its programme offerings are located within the college and its sub-structures with the devolution of power coupled with accountability regimes to the colleges as critical elements. There are two other university wide structures, namely, the University Research Office and the University Teaching and Learning Office (UTLO), each headed by a Deputy Vice Chancellor. The professional staff within each college have professional support responsibilities at the college level as well as at the school level. The programmes offered are usually located at the college level, but the discipline staff across the schools offer specific modules constituting the various programmes. A further academic layer supporting academic staff is that of tutors in certain disciplines. The University also has other support services for staff and students and this includes academic development coordinators, sporting facilities, student health support services and personal counselling services. The latter support

services for students, amongst others, comprise a clinic, an HIV/AIDS centre, a disability unit and a general counselling centre.

## Leadership at the University of KwaZulu-Natal

As indicated in the institution's biography, the University of KwaZulu-Natal operates within a college framework and it has four colleges offering an array of programmes. There is an executive committee chaired by the Vice Chancellor of the University which comprises the six DVCs, the Chief Financial Officer and the Registrar who manages the university affairs overall with decision-making powers devolved to colleges and other key personnel who are responsible for university-wide issues. The leadership model evident is that of distributed leadership (Bolden et al., 2009). Teaching and learning across the university is a cross-cutting institutional issue that has far-reaching implications (such as institutional image, financial viability and quality assurance of its programme offerings) for the university. Noting this, a DVC for Teaching and Learning forms a key component of the senior executive of the university within a distributive leadership (Bolden et al., 2009) perspective. The university has positioned itself as a 'premier university of African scholarship' ([www.ukzn.ac.za](http://www.ukzn.ac.za)). In order to realise its vision, mission and strategic plan in respect of teaching and learning, the university teaching and learning office (UTLO) and the DVC are responsible for providing such strategic leadership across all five campuses.

## A Focus on UTLO Structure and Leadership in Managing Student Access, Retention and Success

The UTLO portfolio ([www.ukzn.ac.za](http://www.ukzn.ac.za)) involves managing key partnerships with the national Department of Education, several funders and donor organisations, managing funded projects based on access, throughput and success of students, such as the South African Norwegian Tertiary

Education Development project (SANTED) and Department of Education foundation programmes. UTLOs portfolio is extensive and it includes the monitoring of specialised project funds dedicated to the access and success of students; writing and coordinating such project reports; developing proposals for future funding in respect of teaching and learning by co-operating with Colleges/Faculties, the UKZN Research Office, UKZN Foundation and others. UTLO ([www.ukzn.ac.za](http://www.ukzn.ac.za)) shows a dedicated commitment to both new and seasoned academics by developing 'their teaching knowledge via workshops, seminars, and conferences that address a variety of topics, techniques, and programs'. UTLO has identified three key priorities:

1. To lead curriculum transformation at the university. This entails supporting the vision and mission of African scholarship, to enact curriculum reforms to ensure curriculum relevance as well as responding to SA's developmental needs. Additionally, to meet the requirements of the Higher Education Qualification Framework and National Qualifications Framework as well as undertaking a review of current programme offerings and devising new qualifications.
2. To continue to promote access but strengthen the focus on throughput (progression) and success. Hence, research-based evidence from drop-out studies and carving out ways to sharing best practices in all programme offerings (including teaching and learning in access, foundation and mainstream programmes).
3. To effect a rotation of development, implementation and review of staff and student policies and procedures which impact on teaching and learning. Most importantly, the office claims 'we focus on the implementation of the Language Policy, in relation to teaching and learning.'

An interesting aspect of UTLO is its implementation of 'incentives and rewards' for academic staff who excel in teaching (for example there are annual 'distinguished teacher' and an 'Excellence in Teaching' awards. Another idea is to integrate ICT into teaching and learning to fulfill the needs of the twenty-first century workplace.

A significant moment in the recent history of UKZN came amidst claims of the ‘articulation gap’ of students (Lewin & Mawoyo, 2014) and their ‘underpreparedness’ for university in SA across institutions. Internationally, there had been caution expressed in pathologising students when discussing their lack of success (Woodley, 2004). UTLO leadership (Dhunpath & Vithal, 2012) in a landmark publication, bravely asked whether institutions should not rather be admitting to being underprepared rather than passing the buck to schools and students. This revelation was instrumental in seeking to alter the higher education access and success discourse in SA and the lens of viewing students as deficit. Most importantly, it showcased a valuable outlook by UKZN leadership to introspect in its efforts to strengthen its own systems, policies and procedures to ensure students’ success by research-led endeavours to address students’ departure and in efforts to bolster the throughput and graduation rates. One of the university’s efforts was a drop-out study by Ramrathan, Manik, Pillay and Goba. Amongst the findings, Manik (2014, p. 156) revealed that students who had departed the university had singular and multiple reasons for leaving but the majority had ‘multiple stressors’ leading to ‘multiple deprivations’ (finance, poor career choice, poor or lack of counselling by the institution’s support personnel, academic performance, personal reasons) but there were triggers (key was failing modules) that led to their final decision to exit. Most importantly was the finding that the majority of students dropped out without seeking assistance from any of the university’s structures. A later funded study by UTLO on UKZN’s three-year programme offerings in order to reflect and improve, pronounced that UKZN’s programme choices and offerings (via its website and marketing materials) were ‘confusing’ and ‘inconsistent’ and ‘can contribute to students making poorly informed programme choices’ (Borden, 2016, p. 02).

UTLO has become the hub of online activity from March 2020, informing and managing the training of staff and students for online teaching, learning and assessment in preparation for the re-opening of UKZN in June 2020. There are manuals and videos for reference on navigating platforms (such as Moodle, Zoom and Google teams), in addition to the ongoing live training via Zoom. The university has live support options through Skype for business and WhatsApp. Additionally,

the university has embarked on several critical endeavours to ensure that students continue their academic studies and complete the year successfully. All staff and students have access to zero-rated websites where they will be able to use 500 MB of data free to undertake their work. Staff were supplied with data and devices to connect to the internet. Vulnerable students were also considered and laptops, data bundles and devices were delivered to students in rural disadvantaged areas during the lockdown period. This was to ensure that all students are prepared for the dry-run of using the online platforms for all their modules' delivery, before the opening of the institution for online instruction in June 2020. The dry run was assessed and modules were adjusted given staff and students' feedback on the dry run before final implementation of all online modules.

UKZN has sought to strengthen and improve its academic monitoring and support system (AMS). The AMS report is annually tabled at senate for feedback and comments on the findings so that processes can be tweaked for improving AMS strategies for the future. AMS offers up-to-date information on each student, tracking their performance and monitoring their progress across their degree, with early warning signs and interventions. For example, after the first test or assignment when marks are captured, at the discipline or school level, 'at risk' students are identified. They are also identified at the end of the first semester. 'At risk' students are referred to health and wellness programmes or psycho-social help in addition to academic assistance via supplemental instruction, tutoring and peer assistance. There are regular meetings held at school and college level to discuss the status and progress of 'at risk' students. Students are also taught to monitor their own progress and submit a 'self-report' to their assigned academic development officer (ADO). Given that ADOs are a key component of AMS, their effectiveness in assisting students is crucial, thus their development and growth is of paramount importance. Hence, they are encouraged to study one UEIP module during their contract term, they are supported and mentored by the AMS co-ordinator and they present their research papers at the university's Annual Teaching and Learning Conference. It will be interesting to monitor henceforth how 'at risk' students are supported during the time of COVID-19 with additional measures for the academic year of 2020,

after a two-month lockdown period with the closure of universities in March and re-opening in June.

It is evident that reflexivity is encouraged as is evident in the AMS Report of 2017 which noted that the following two issues needed to be addressed: the ratio of AMS staff to students as a result of colleges expressing that this ratio is too high; the financing of AMS because the Teaching Development Grant (TDG) was to be replaced by the University Capacity Development Grant (UCDP) in 2017. Below is a summary of undergraduate AMS self-reported ratings in 2016 (UKZN AMS, 2017).





## Conclusions

There is no 'silver bullet' to bring an end to students' slow progress and departure from public higher education institutions in SA, including UKZN, and to ensure students' retention, their timely degree completion and success at university. The challenges are ever-spiraling for a country still plagued by historical, socio-economic and political inequalities, apart from the arrival of COVID-19, which repeatedly threaten to unwind higher education, as has become the norm in the past few years since the widening of access into higher education for the previously disadvantaged. Thus, despite outbreaks of destruction to the university at several campuses recently, and the sudden two-month closure from March to May 2020 due to South Africa's lockdown, there is a silver lining evident, especially at UKZN in its leadership commitment. At the highest level of the institution, the DVC has called for ongoing engagement between management and students to resolve students' access challenges at registration and their access to online teaching and learning during COVID-19. Leadership commitment at various other levels are evident, to forge ahead and attract private and staff funding apart from national block grants to support research, teaching and learning at university and students in their desire to persist in their studies despite the lack of finances. There is an understanding that UKZN is located in one of the poorest provinces of South Africa. Additionally, staff and student policies and practices are constantly reviewed and refined after their implementation; for example, the introduction and development of isi-Zulu as a language for teaching and learning from 2014 onwards, a dry-run of all modules online to gauge what the challenges will be for students when the system goes live in June 2020. This signals a commitment by the institution to grow and develop better strategies to implement and support the academic project of teaching, learning and research whilst being committed to its African identity. The Academic Monitoring and Support system across UKZN is underpinned by the Academic Monitoring and Exclusions Policies and Procedures of 2009 and it was updated in 2012. It is an example of an effective institutional tool to identify early warning signs of 'at risk' students and to assist and monitor

them in addressing their performance through a variety of support mechanisms so they can achieve success in their studies and timeous graduation.

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# 7

## Engaging Staff in Improving Retention and Success

Roisín Curran

### Introduction

Active engagement of many staff across institutional silos is needed to improve student retention and success. Collaboration between staff alone, however, isn't enough; we need to operate within a culture that embraces 'students as partners'. This can be problematic and requires a shift in mindset and practice for some staff and students. The construct 'student engagement' is challenging to define and we need to be clear to which aspect of student engagement we are referring when discussing the issues and difficulties and how to improve them. This chapter will focus on one institution's involvement in the What Works? Student Retention & Success change programme (2013–2016) (Thomas et al., 2017), the learning gained and strategies recommended.

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## Dimensions of Student Engagement

As discussed previously (Curran, 2017), three dimensions of student engagement have been identified in the literature: behavioural engagement, emotional engagement and cognitive engagement (Fredricks et al., 2004; Kahu, 2013; Solomonides, 2013; Trowler, 2010). These are defined as:

- Behavioural engagement – students who are behaviourally engaged would typically comply with behavioural norms, such as attendance and involvement, and would demonstrate the absence of disruptive or negative behaviour.
- Emotional engagement – students who engage emotionally would experience affective reactions such as interest, enjoyment, or a sense of belonging.
- Cognitive engagement – cognitively engaged students would be invested in their learning, would seek to go beyond the requirements, and would relish challenge.

It is also suggested (Solomonides, 2013) that the interplay between the three dimensions at the level of the individual student is important and would allow us to examine what is within our control and what is not, so that we might clearly focus on what we can enhance.

## Background to the Change Programme

The What Works? philosophy is centred on belonging, engagement and building self-confidence.

It is the human side of higher education that comes first—finding friends, **feeling** confident and, above all, **feeling** a part of your course of study and the institution—that is the necessary starting point for academic success. (Thomas et al., 2017, p. 8)

The What Works? (What Works? 2) Student Retention & Success change programme (2013–2016) funded by the Paul Hamlyn Foundation, coordinated by the then Higher Education Academy, and Action on Access purpose was to examine how higher education (HE) providers can improve student retention and success. It involved 13 UK Universities with the aim of promoting belongingness within the first-year student cohort. The full What Works? 2 report (Thomas et al., 2017), published by the Paul Hamlyn Foundation, draws together evidence from the 13 institutions, 43 discipline areas, and many interventions and changes over more than three years. Unique to Ulster University, as one of the 13 institutions, was that seven discipline areas (rather than three as per other institutions) were involved.

Our project began in 2013 and brought together seven disparate discipline areas across four campuses (spanning 70 miles) in Northern Ireland. The discipline teams were: Law, Built Environment, Creative Technologies, Computing, Nursing (Mental Health), Accountancy and Textile Art, Design and Fashion. These seven teams comprised, in the main, the course staff team and a number of students from first, second and final year of the undergraduate programmes. In order to achieve the objective of the project, which was to improve retention and success, the core team (comprising a senior manager, project lead, data expert, faculty L&T representative, students' union officer and student) and discipline teams were engaged in the following:

- Implementation of specific interventions in the areas of induction, active learning and co-curricular activities.
- Qualitative evaluation of the interventions involving an Appreciative Inquiry approach in 2014–15 and included focus groups with a representative sample of first-years in the seven discipline areas.
- The administration of 'belonging surveys' with all first years in the seven discipline areas. Four surveys were carried out, two in 2013–14 and two in 2014–15. The second survey in 2014–15 was also administered to second-year students. Analysis of the surveys was carried out by the Paul Hamlyn Foundation and enabled us to monitor, quantitatively, trends in relation to students' confidence, engagement and belongingness.



- The use of institutional data such as attrition rates for each of the areas to monitor impact as a result of the interventions.
- Focus groups with the staff course teams in semester two, 2014–15, to explore the barriers and enablers to implementing change at the discipline level.

This chapter will focus on the strategies used to engage staff in implementing change and the feedback from staff through the focus groups.

## Key Learning from the Change Programme (What Works? 2)

Drawing together impact and learning, and reflecting on the change process, this programme has highlighted for us the multifaceted nature of student engagement. The outcomes and impact of the interventions implemented and evaluated suggest the importance of maintaining a strong focus on the *affect* or *emotional* dimension of student engagement as well as the behavioural and cognitive dimensions. Our research has allowed us to identify four strong themes which we believe are priority areas on which to focus enhancement of the student experience, and these are: *pre-entry contact*, *mainstreaming pastoral care*, *ways of thinking and practising the discipline*, and *peer support*. We have found that the characteristics of effective practice across the discipline areas have included: building of trust relationships between staff and student and student-student; engagement through partnership; and the building of communities of practice which incorporate ongoing formative feedback. We believe that the individual interventions chosen within each discipline area, in the main, work well in that discipline but it has become evident that ‘one size does not fit all’ and future implementation of enhanced practice needs to take account of disciplinary differences. In addition, the course teams have identified two factors for consideration. Firstly, that each year group can be very different and student diversity can change the dynamics of each cohort. Therefore, each course team, whilst adopting what works must remain vigilant and be prepared to

adapt their practice to support the students enrolled on their modules on an ongoing basis. Secondly, that whilst interventions may impact positively on first years in semester 1 and semester 2, sometimes a dip in belongingness, engagement and self-confidence amongst second years can occur. Therefore, it is important to consider further the second-year student experience and how this may be enhanced.

## Characteristics of Effective Practice

As stated above we have found that the characteristics of effective practice across the discipline areas have included:

- building of trust relationships between staff and student and student–student
- engagement through partnership
- building of communities of practice which incorporate ongoing formative feedback.

Without these, it may prove difficult to nurture and support the human side of HE (Thomas, 2012) alluded to above. On reflection, the enablers to building trust between staff and staff and students, the adoption of a ‘students as partners’ ethos, and the building of communities of practice to effect change and improve retention and success include both strategy and culture. Strategies may change over time, and indeed should change, but the culture of the institution needs to be supportive and always true to the fundamental purpose of HE and to remember the diverse populations that will enter and transition through the institution each year.

## Strategies Used to Promote Active Staff Engagement and Implement Change

Team working and support provided

The initial challenge of instilling a culture of team-working was overcome by securing ‘buy-in’ from all the relevant stakeholders (for example, Heads of School, Discipline Leads, First-year Tutors) in each discipline area. Regular meetings and opportunities for face-to-face communication within and across the different teams were vital to maintain momentum and to recognise and disseminate successes. This takes time and, in our case, required the core team to set up initial and follow-up meetings with each of the seven discipline areas across four campuses.

## Funding Support

Seed funding was made available to the discipline teams for planned activities and evaluations during the first year of the project. Further funding for collaborative projects across disciplines which focused on embedding effective practice was made available in the second year. This resulted in one project involving four disciplines developing an ‘info-graphic’ to be used at pre-entry with prospective students. Its aim was to clarify the nature, content and requirements of each course so as to help recruit the right students onto each programme. Funding was also made available for pre-entry activities for new student cohorts in the third year of the project.

## Strategy Development

The ethos of ‘students as partners’ and supporting student success was embedded in the university’s Learning and Teaching Strategy at that time. The change programme helped to create spaces to allow conversations to develop a key strategic aim 2 – *‘To provide transformative high quality, learning experiences through the promotion of meaningful staff-student partnerships that engender a shared responsibility’*. It also created numerous opportunities for debate on the student experience informed by the growing body of evidence generated by the discipline-based projects.

## Professional Development, Recognition and Reward

The course teams and individuals were encouraged to seek further opportunities for professional development and recognition through internal continuing professional development (CPD) schemes, such as undertaking leadership programmes leading to professional qualifications and seeking recognition for categories of fellowship aligned to the UK Professional Standards Framework (UKPSF). The institutional team sought opportunities to gain national recognition for the collaborative work undertaken in improving student retention and success.

Over the course of the change programme, nine staff members completed an Aspiring Leaders programme leading to ILM (The Institute of Leadership & Management) Level 5 Certificate in Leadership and Management. In addition to staff already holding a category of fellowship, over the course of the change programme 19 staff members achieved recognition (one associate fellow, seven fellows, nine senior fellows, and two principal fellows). Eight staff members were either shortlisted or won an award at the annual Students' Union Learning & Teaching Awards. This process of annual awards is student-led and aims to raise the status of, and thereby promote and celebrate, excellent learning and teaching practice at Ulster. Six staff were promoted to new leadership roles. Further recognition of our work was achieved in 2017 when the What Works? team were shortlisted as one of the finalists for the national HEA Collaborative Award for Teaching Excellence (CATE) award.

As well as certificated professional development, the teams also engaged in workshops; for example, an evaluation workshop was held, facilitated by an external expert, which allowed the core and discipline teams to discuss, refine and agree on a project-wide evaluation strategy using the Appreciative Inquiry approach. A follow-up to this allowed teams to share results from the evaluation and analysis data from student focus groups. Towards the end of the project the core team and discipline team leads attended a two-day residential writing retreat which enabled sharing of all data to date and to engage in case study writing. Peer groups were formed which facilitated cross-disciplinary peer review before

submission of case studies. In total, ten case studies of effective practice were produced and included in the *What Works? 2* final report.

Students were also encouraged to reflect on their experiences within the programme as part of the Student Edge Award (this award is designed to enhance the employability of Ulster students by providing official recognition and evidence of activities outside their programme of study). Ten students received EDGE recognition for their contribution to the project.

## **Sharing Information**

The core team held individual progress meetings with course teams at regular intervals – this provided an opportunity to discuss progress and address challenges. Staff and students had access to a virtual learning environment (VLE) area for the change programme which provided the opportunity for teams to view resources, the research evidence-base, and to share and disseminate their practice. The core and discipline teams participated in sharing-practice events, which brought together staff and students to disseminate progress to date, to share issues and challenges, and to get external input from invited speakers. Keynotes provided by external speakers included topics such as: distributed leadership, communities of practice, and the possibilities and challenges of partnership.

## **Curriculum Development and Building Learning Communities**

The project encouraged course teams to use statistics and feedback available to examine their approaches to teaching, learning and assessment in modules on an ongoing basis. This continuous evaluation and reflection ensures that course teams are responsive to the needs of the students and has already led to improved student success across a number of programmes. This includes a renewed focus on small group teaching and the importance of creating a welcoming community to foster belongingness and ease the transition to higher education. In 2018, building further on

the learning from the What Works? 2 programme, the institution has seen the design and development of the Integrated Curriculum Design Framework (ICDF) (Murphy & Curran, 2018). The ICDF is an overarching framework that consists of a three-phased approach to curriculum design, guiding programme teams to pro-actively design, develop and deliver a holistic and innovative curriculum for our learners, industry and economy. It encompasses the three dimensions of curriculum: Knowing, Doing and Being (Barnett & Coate, 2005). A significant aspect of ICDF is that it promotes partnership between academic staff and central departments, and this encourages the fusion of key curricula themes into the curriculum. These themes include information literacy skills, education for sustainable development, wellbeing, digital capabilities, and employability and enterprise. Strategically aligned to the university's *Five & Fifty* vision (Ulster University, 2016), ICDF focuses on what the student needs to know, be able to do, and needs to be and become.

The three phases of ICDF are:

Phase One: Contextualised Research and Stakeholder Engagement

Phase Two: Programme Design and Development

Phase Three: Programme Approval

An ICDF SharePoint website has been developed which, for the first time, pulls together in one place all the informing strands, websites, information sources (internal and external), and resources to support those leading in their respective discipline areas in the (re)design of curricula.

### **Availability and Use of Data**

The core team worked closely with the Quality Enhancement Unit, which allowed us to regularly monitor institutional quantitative data for the discipline areas in relation to retention and success. After semester 1 each year, data for each discipline area was made available which included: early leavers, non-returners, fails, repeats, resits, leaves of absence and a total percentage attrition rate. Similarly, year-end data was provided and

collated for the participating programmes. This was supplemented by internal forms (action plans and progress reports) developed by the core team which discipline leads completed twice-yearly in relation to progress of interventions and subsequent impact. In addition, we placed a strong emphasis on gathering qualitative data in order to understand more fully the impact of the change programme on the student experience to enable us to develop future L&T strategies and policies to sustain our work and impact across the institution.

## **Student Engagement**

The university's vision is illustrated in our impact on students, society and the economy. We wish to offer a student experience that leads to a satisfying, rewarding and assured career path. The work undertaken as part of this change programme has helped us to understand the experience at Ulster more fully, from the perspective of students, staff, the institutional context and the wider socio-cultural context. The outcomes and outputs from this project is used to help with the wider adoption of effective practice and a change of culture to embrace the values of openness, living knowledge, spirit and fresh-thinking (Ulster, 2016).

This project has led to the further recognition of the importance of initiating engagement with all students prior to their application to the university. To support this there has been an increasing focus on a variety of methods such as school visits, tailored open days and evenings, outreach projects and summer camps to support and inform potential applicants to the university. These aim to not only inform potential applicants about their subject area of interest – but also the expectations and realities of higher education.

The project has demonstrated the positive effect of peer support – for example, peer coaching and peer-assisted study sessions (PASS) – on the student experience. These initiatives have created belonging for first-year students as they make connections with others at different levels of study and create formal and informal support networks. For the student mentors and coaches, these peer relationships provide valuable experience and increase their engagement and confidence.

Alongside this project, there has been an increased focus on enhancing the student voice at Ulster University. The Students' Union (SU) has worked in partnership with key central departments and faculty staff to develop student representation at every level. Full-time officers now sit on internal revalidations and play a role in the interview process for senior management roles within the university. At course level, a particular focus has been placed on electing and recruiting representatives – leading to a significant increase of representatives registering with the SU over the past five years. This in turn leads to an improved attendance at SU training and events which generates greater engagement and therefore representation. A further development has been the introduction of the 'senior student representative' position to which students are elected at School/Department level, and which creates an important link between course and faculty. A new faculty-level, informal meeting has been introduced following recognition that the student voice was not most effectively heard at the formal Faculty Meetings. These 'Student Experience Forums' allow students to lead on the agenda and informally discuss their course with their Dean and Head of School. Staff and students have reflected on these and there has been overwhelming support for their effectiveness in engaging everyone to positively contribute to all aspects of life at Ulster.

Through the change programme, 'students as partners' has been a key principle, which underpinned implementation of the projects. This has enabled us to include students in the implementation of solutions as well as identification of challenges with curriculum design and delivery. As an approach to student engagement, we have evidence which strongly suggests that it enables capacity development for students to engage and staff to be engaging and contributes to the personal and professional development of both (Curran, 2017).

## Feedback from Staff on Implementing Change

One of the ten case studies of effective practice produced by this change programme focused on the importance of teamwork to improve the student experience (Honan, 2016).



The evidence generated from the focus groups suggests that effective team-working, built on a shared ethos, leads to improvements in the student experience.

Staff referred to how their attitudes have changed in relation to student engagement as a result of their involvement in the project. They felt that the project allowed them to reflect on the fact that a settling-in period is not confined to first-years during induction but a re-settling in period is needed for both second-years and final-years.

I think that is what the student retention and success project has made us think about. ... induction isn't something that's just a 1st year activity. It's for those returning back to 2nd year. You have to make sure that they settle in again and final year as well as they are coming back in from placement. (Staff member C)

Staff highlighted three key factors, which were instrumental in the success of the project, namely, support from staff, student involvement and effective branding/communications of the project.

one of the key things that we have learnt is communication and if you brand everything that we have done it's about communicating and doing it in a different way and through different mediums and doing it slicker, doing it when it's necessary and doing it better and I think if we take that away – communication with our students and also among colleagues needs to be strengthened as we move forward as a school ... (Staff member B)

Staff discussed how initially they had a negative reaction to the project because of their workloads. However, having being involved in the project, they have a different view and they believe that the project provided them with emotional support from other staff in order to sustain the project and continue their good work. It also provided them with an opportunity to reflect on their engagement activities and to put student engagement as a central aspect to all activities. In fact, they stated that the project should be emulated across all faculties and schools.

I must say when we were selected for this project the fear of God ran through me ...but actually it gave me that support and that sense of working with other people and actually just networking with other people gives you the opportunity to share good practice. (Staff member D)

Staff highlighted that the project provided staff with an opportunity to re-engage with their career. It allowed them to take risks and try out creative ways of how to engage students. It provided them with an opportunity to focus on the student experience rather than attrition figures; having a focus on the inputs rather than the outputs. As a result of the project, staff communicated across faculties more often and shared best practice.

I think a project like this though has actually helped student, faculties and cross faculties disseminate the shared practice and I think that's good in trying to get staff to engage who maybe aren't engaging the way they should. Staff can become disengaged themselves and I think a high-level project that is bringing faculties together and giving people the opportunity to take supported risks – that's what's been really good about this project. It has given people that support to move forward with ideas and address problems rather than trying to tweak statistics and feel like they are getting beaten by a stick. The more the university can take this model and keep it going with maybe different agendas or looking at different aims within the teaching and learning strategy I think that would be good practice for the university. (Staff member E)

The project acted as a catalyst in improving the morale and team cohesion between staff members. Staff shared the responsibility of addressing the issue of attrition in their school.

I do believe it has had a positive effect on the team and a positive effect on the student body. It's something we have been working towards because we are dealing with a very difficult subject area in 1st year and I think that it is important that projects of this nature impact on how the students perform on that particular module. (Staff member A)

I think the team is important. You do need the team aspect and it's just about being reflective and dynamic and working but again it's having that student body as part of your team. (Staff member D)

Staff noted that they consult each other when addressing certain issues such as attrition in order to find the best possible solution. Staff highlighted how they worked well together as a team. The team functioned effectively using a 'revolving leadership' in order to ensure that momentum was sustained when other members had a heavier or lighter workload. Within the team, each staff member had a different job role to play in the school. Some team members had more or less contact with students and senior management. By the team having contact with all key stakeholders, this helped propel the project through further funding and promotion of student retention and success initiatives. So if all team members have a touch point with multiple stakeholders then it's easier to do things more meaningful and inventive.

That makes it easier to get things out there but there are other times when maybe I am on a committee that nobody else is on and if I can bring that back I would certainly do that or if I get heads up that something's down the line and then we can be ahead of the game. Some of us are more close to the students than the rest of us and we will hear what they are saying so I think it blends, it's not perfect but it works pretty well. (Staff member B)

In addition, staff discussed how their awareness of the student experience had been heightened as a result of the project. Initially, there was a lack of commitment but, as the positive impact of the project became more visible to staff, they began to consider student retention and success as a core part of strategic planning and reviews.

I think the buy in was always there but it was just I suppose even understanding that the project can make a difference and it's a lot of learning as you go and just sort of trying things and see if they work. At this point now we probably have a deeper understanding of what we want to do. This stuff now feeds organically into our normal planning and our considerations for taking the course forward – we allocate a space for this on the agenda whereas before it might just have been solicited from the information that

we were discussing anyway. We're now more aware of the transitional periods not just for first years but for year 3 and year 4 students. (Staff member E)

## Conclusions and Implications

The What Works? 2 change programme at Ulster has been a very successful and highly visible project. There are tangible outputs, which are invaluable to the implementation and further development of strategies and policies. Learning has occurred at both the discipline and institutional level and with further appreciation of the needs of today's student. This learning, since the COVID-19 pandemic and the pivot to remote work and study in Spring 2020, has sharply come into focus. Although the programme officially has ended, there is a strong impetus to continue the innovative work and, through our recommendations below, we will continue to use the strong evidence-base generated to make informed decisions regarding all aspects of the student journey. These decisions now must consider all modes of learning whether that be face-to-face, blended or fully online so that we remain agile to any future changes to the HE environment. In relation to the focus for interventions, this encompasses the four impact themes identified:

- **Theme 1: Pre-entry contact**

Early engagement at the pre-entry stage of the student journey enhances the transition process and is crucial in fostering confidence in first-year students both in terms of adapting to a less structured learning environment as well as learning new skills. It should be predicated on a strong course team ethos, which is: welcoming for new students, fosters belongingness, and enables students to integrate into a disciplinary community of practice in which they will develop.

- **Theme 2: Mainstreaming pastoral care**

Academic staff have a critical role to play in student well-being, being best placed to observe behaviour in the learning environment that might

indicate that a student is in need of support. Developing student capacity to engage and to deal with challenges through a sustained induction process which fosters staff–student relationships results in students being more likely to have the energy and motivation to do well in their studies.

- **Theme 3: Ways of thinking and practising the discipline (WTP)**

Active-learning activities which are centred on the discipline allow students to gain not just subject-specific skills but also to develop WTP, values and attitudes relevant to their professional area through working alongside experienced practitioners. This impacts positively on: student belonging, confidence, engagement, and professional awareness thereby enhancing graduate attributes and improving employability.

- **Theme 4: Peer support**

There is strong evidence of the impact of peer relations in the student learning experience. Peer-peer relations when introduced from an early stage of the programme can be used to improve student engagement and belonging. Peer support has developed a strong sense of belonging at Ulster and this project provides the underpinning evidence to develop a road map of best practice to consider when embedding peer support activities.

It is recognised that policies and processes should be updated to reflect the learning from this change programme. It is also necessary for academic staff to work closely with key areas such as: professional development staff, Students' Union, ICT staff, Employability and Marketing, and Student Well-being. An over-arching recommendation is that institutions rethink their priorities, policies, processes and practices to enable a culture of belonging to be realised. This programme has identified four themes above which provide a focus for which enhancements should be directed in order to improve first-year student retention and success. In addition to these themes, it is also recognised that a culture of *team-working* and an ethos of '*students as partners*' should be further embedded across all discipline areas and include *all* staff and students. Finally, it has become evident that second-year students can experience a lessening of

their sense of belonging and that further research could be directed to this stage of the student journey.

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# 8

## Listening for Retention: Enabling Student Success Through Partnering with the Student Voice

Luke Millard and Richard Evans

### Introduction

This chapter focuses upon a partnership between a university and students' union that sought to achieve shared goals. The ambitions were centred around improving the quality of the student experience and the creation of a greater sense of learning community, or, as it later became recast, belonging. The partnership journey began in 2008 and it provided a coherent train of thought and direction for the next 12 years. It involved the co-creation of an award-winning student engagement initiative (Freeman et al., 2014; Nygaard et al., 2013); an institution-wide student employment programme (Millard & Tallis-Foster, 2021); a national retention project (Millard et al., 2016; Thomas, 2012); a new approach

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to student representation (Chapman et al., 2013); a commuter research project (Thomas & Jones, 2017); and an institutional student employability initiative. The path these took and the learning from them will be shared within this chapter as we focus on the benefits that collaboration can provide for students and institutional partners.

## Institutional Context

In 2020, Birmingham City University has a student population of around 24,500. It is located in the centre of England within a major city conurbation of around one million people. It recruits regionally with over two-thirds of students originating from the region and has a rich ethnicity mix of students with over 50% coming from Black and minority ethnic backgrounds. The university now has two main campuses but, in 2008 when this partnership working began, it retained eight discipline-specific campuses spread across the city.

At that time, feedback from local and national surveys revealed that students felt a lack of connectedness with the university. They were not members of a university, but part of a school, a faculty or a campus (McMillan & Chavis, 1986). There was little evidence of a university experience and in such circumstances the Director of Learning Experience stepped forward to propose a solution. This focused on an attempt to start to generate a sense of learning community through the provision of opportunities for students to engage in partnership projects with academic staff on campus.

The Student Academic Partners (SAP) scheme that emanated from that new focus won the Times Higher Education award for outstanding support for students in 2010 and had as its focus the co-creation of learning opportunities that would improve the quality of the student learning experience. Through this co-creation, students would be employed to work with academic staff on these developments (Curran & Millard, 2016). This would see students remain on campus beyond their normal classroom contact hours and it was hoped this would generate some sense of community and cohesion. At that time, the Students' Union (SU) was intrigued by the proposal and a change in leadership of the SU enabled

an initially sceptical SU to embrace and engage in co-designing the opportunity.

The initial scepticism about partnership working was largely driven by an inherent belief that the university was encroaching on SU territory. In that it 'always had been' and 'should continue to be' the student representatives of the institution that would work with students on the development of the student learning experience and then lobby, advocate or represent this to university leadership. Moreover, an established framework was already embedded, through Boards of Study that sought to deliver student representation that improved the learning experience based on student feedback. A further important concern around increasing partnership was around how partners could continue to hold each other to account (Chapman et al., 2013).

The partnership development was assisted by a change in the policy landscape as student engagement became accepted as a norm and started to become enshrined in higher education sector policy. The year 2012 saw the academic and student theatres align as the UK's Quality Assurance Agency (QAA, 2012) produced a new quality code which included a chapter, B5, on student engagement that highlighted the expectations the QAA had of any university it inspected. For example, indicator 2 (QAA, 2012, p. 8) set an expectation around 'Higher education providers create and maintain an environment within which students and staff engage in discussions that aim to bring about demonstrable enhancement of the educational experience'.

In addition, the same year saw the production by the National Union of Students (NUS) of a Manifesto for Partnership (NUS, 2012a, 2012b). This visionary document urged students' unions to utilise the student engagement opportunity and seek to partner more effectively with their associated universities. The introduction to the document from the Vice-President (Higher Education) at the NUS stated:

Student engagement is a great concept but it needs to be deployed to radical ends. Students as partners is not just a nice-to-have, I believe it has the potential to help bring about social and educational transformation, as long as we know what we are trying to do and we maintain a critical

attitude about the ways the concept is adopted and used. (NUS, 2012a, 2012b, p. 1)

The Students' Union at BCU was in the forefront of this challenge. The development of the SU's 2012 Strategic Plan became a key driver as it set out creating a sense of belonging as a strategic theme through the enabler of a partnership approach. The SU internal narrative focused on the possibility of strengthening the impact of the SU, a relatively small staff team supporting students across a disparate estate. As Chapman et al. (2013) highlighted, some staff in the institution were not confident in working with SU staff on academic improvement due to their own experiences when a student, thus further reducing the SU's reach. In short, the SU could not further the organisation's purpose and vision without furthering the relationship with the institution (and students) to increase capacity and ultimately impact. This approach was supported by the perspective from the NUS that 'partnership is an ethos rather than an activity' (NUS, 2012a, 2012b, p. 8). The recognition of a long-term, sustainable relationship, in which both parties may not always agree, was key.

The partnership approach was later echoed academically by Healey et al. (2014, p. 7):

Partnership is essentially a process of engagement, not a product. It is a way of doing things, rather than an outcome in itself. All partnership is student engagement, but not all student engagement is partnership.

The partnership was enhanced further through the 0.5 FTE secondment of the SU's Head of Engagement to the university's Centre for Enhancement of Learning and Teaching (CELT). This secondment was formalised in a written agreement that outlined the remit of work to be undertaken of mutual benefit to both organisations and the membership. Included in the key tasks was the challenge to work throughout to enhance the SU/CELT partnership and demonstrate its benefits.

The strategic nature of these partnership developments and the impact it had across the university and sector was recognised in 2013 when the university and Students' Union was awarded the inaugural Higher

Education Academy and National Union of Students Institutional Partnership award. The award recognised and celebrated institutions and their students' unions that had developed strategic approaches to partnership working to effect change and enhance the student experience.

## An Opportunity: What Works? 2

In 2011, the Higher Education Academy and Action on Access organisations, with Paul Hamlyn Foundation funding, promoted a programme called What Works? 2. This was founded upon an initial project, What Works?, that sought to develop institutional interventions to improve student retention and success. What Works? 2 was generated so that institutions could build upon the models and learning generated by the first programme.

The university and Students' Union partnership was successful in applying for the programme. That application focused upon student engagement and sought to deliver the challenge issued by the NUS manifesto. 'At its roots partnership is about investing students with the power to co-create, not just knowledge or learning, but the higher education institution itself' (NUS, 2012a, 2012b, p. 8). For the BCU/SU team this programme offered that opportunity, to institutionally redesign the way in which students transitioned into the university and were supported through their first year experience (Millard et al., 2016, p. 91–120).

The approach was founded upon the What Works? model (Thomas, 2012, p. 5) which highlighted the need for any intervention to be within the academic sphere of a student's learning experience to achieve the greatest impact. Traditionally, this was a very difficult space for a Students' Union to gain access to and the experience from What Works? indicated that social and service activities had limited impact on students unless they were embedded within that academic sphere. Therefore, the challenge was clear, and for the Students' Union there was an evidence-based awakening around the need to effectively engage in curriculum-based activities to have significant and sustainable impact.

## The What Works? 2 Intervention

The What Works? 2 programme at BCU was targeted at the disciplines of media, built environment and radiography. These three course teams were set the challenge of constructing a new first-year experience that enabled greater levels of retention and student success. This construction could not happen in isolation as the collaborative planning events required course teams to bring at least an equal number of students with them to each event. The symbolism of hosting these events within the Students' Union was not accidental. The profile of the Students' Union was raised through these meetings and the course teams recognised the need to embed their students in the design process. Three half-day events were held over a two-month period. The radiography course team saw such value to student perspectives that at one of the events they brought over 20 students to work with the five members of academic staff (Millard et al., 2016, p. 113).

The organisers saw the developmental events as an opportunity to banish myths of what was not possible. This led to a support team of staff from various university departments – quality assurance, IT, Library and educational development. This enabled the imagined rules to be addressed immediately around such issues as 'the regulations won't let me do this' or 'the VLE can't do this'. In addition, the education development team could direct funding to make activities happen, to pay for student employment or to purchase software. The Students' Union was also able to provide a solution-focused approach and help students create discipline-based societies or build a new engagement activity in welcome week.

Through this process the School of Media saw a 7% improvement in retention as it created an online pre-transition website that was supported by final-year students (Millard et al., 2016, p. 103). Once on campus, students were supported by Student Success Advisers (SSA) who could monitor student attendance, ensure students met with personal tutors, and engage in further dedicated support activities. These SSAs were key as they had the sole focus of ensuring that students were engaging with their peers and academic staff. The additional resource also led to

higher-level engagement with the Students' Union and other support services across the university.

## Beyond What Works? 2

Through SAP and the What Works? process, the Students' Union and university had developed a trust around educational development activities. This was based within key senior contacts in each organisation. From a Students' Union perspective it was important that this relationship building was based within career members of SU staff as well as the transient Executive Officers who were voted into the role each year. This enabled the relationship and ways of working to be passed on each year to the new elected officers and saw continuing collaborative approaches that sought to enable student success. One such collaboration began at the same time as What Works? 2 and saw the creation of an institutional student employment programme through the Higher Education Academy's Change Academy programme.

The joint creation of the first UK institutional student employment programme was significant as it saw the Students' Union take an active role in leading the development. The Students' Union provided the employment vehicle for students working for the university. The willingness to support such an approach that actively engaged students in new ways across the campus was a significant step for the Union. The resultant evolution of that model of operation saw the employment role move to the university's HR department, but the Students' Union continued to provide the location for the employment office, staffed by university HR. The maturity of the relationship enabled this transition to take place because both parties saw it as a switch that would advantage the students and further embed the partnership approach.

The benefits of employment on campus for students compared to working off campus has been evidenced in a great deal of research (Astin, 1993; Millard, 2020; Pascarella et al., 1994; Perna, 2010). Astin (1993) stated that working off campus could be negatively associated with completing a degree, but that working on campus was positively associated in relation to student retention and the completion of the degree. For the

partners the opportunity to further improve retention and progression and enable students to gain better jobs through enhanced employability skills appeared to be a next logical step in the partnership approach to improving the student learning experience.

## Student Voice: A Partnership Approach

One of the original challenges that the SU had faced in entering into partnership with the university was around ownership of the student voice (Chapman et al., 2013). The maturing relationship saw this subject being broached in 2015 when the SU and university collaborated to develop a new system to capture and facilitate student voice. The previous system was based on a typical representation model with course and student representatives gathering student feedback and attending Boards of Study. Thomson (2011, p. 25) talked of the challenge of this type of representation as often being tokenistic and of the desire for ‘students being seen to be involved in school’s processes, rather than being active partners in change’.

There were several drivers that instigated the desire to change the status quo. The relationship between BCU, BCUSU and students had matured due to the various initiatives previously identified in the chapter. This led to the partners, as identified by Flint and Goddard (2020), starting to look at the representation system through the lens of partnership. All parties had questioned the impact of requesting students to attend a formal university meeting (Boards of Study) with the inherent power imbalance. Moreover, the language used, format of papers and length of agenda presented a very real barrier to many students (Thomson, 2011, p. 25).

The existing representation system of Boards of Study was founded upon a deficit model. Course representatives would seek out problems on the course and identify what needed fixing. In essence, the focus was on the parts of the learning experience that had failed to meet expectations. This would often result in representatives gathering a pile of negative issues to present to the academics to resolve. This paradigm had to change, as the relationship in many areas of the institution had moved to students being co-producers of their learning experience and the formal system of

student voice was now considered to be restricting the positive work to date.

As a result the proposed system replaced Boards of Studies with Student Feedback Forums where all students, not just their representatives, were invited to meet with course leaders, both academic and administrative. A joint agenda would be created so all participants could ensure their priorities were discussed. Solutions to issues or positive experiences were discussed and students being co-producers of the learning experience was enacted. This was supported by new Student Academic Leaders (SALs) who replaced the course reps and were charged with a leadership role that brought people together to identify challenges and facilitate solution-based discussions. The proposals sought to develop close relationships between the Programme Leader/Administrator and Student Academic Leader(s) that could foster and develop a culture of continuous dialogue between staff and students for quality enhancement and wider learning experience issues.

The implementation was not without its challenges as bringing students together for constructive discussion can prove difficult. At BCU the high number of commuter students and those with significant responsibilities outside of the learning environment (such as caring or paid employment) has presented challenges. However, the change has been successful for the SU as identified by the increasing the number of SALs from 552 (2015/16) to 930 (2019/20). Whilst numbers are a useful indicator it is the change in collaborative culture that is the key, as the partnership of Course Directors and SALs worked together to enhance the learning experience and devise new ways in which students can engage with their course team and peers and enhance a sense of belonging.

To complement the student feedback forums, that by their very nature are focused on course or school issues, the SU felt there was also a need to gather student voices on a wide range of experiences in the academic, social and service spheres. This would enable the SU to be confident it was representing the reality of student perception or experience. To achieve this wider vision the SU also employed a team of students, supported by SU staff, to canvas students on thematic subjects in a timely fashion. Rather than email out invitations to complete a survey, and only receiving completed surveys from students who engage with university



emails, Student Voice Assistants go to where the students are and question them using tablets to record responses. This is increasingly important at an institution such as BCU with a majority of commuter students who remain unlikely to linger on campus. For the SU it was important that students were engaged by their peers and that this was seen as a natural part of the student experience. It also enabled two-way dialogue to take place, with the student voice assistants able to brief students on previous changes that survey outcomes had enabled. Perhaps more importantly, it provided a further student voice channel to be threaded through the learning experience, normalising the perception that the student voice was listened to and acted upon. The scale and impact is also substantial; during 2019/20 academic year the Student Voice Assistants will have engaged students in around 20,000 conversations.

## **Student Success Advisers and Potential Conflict on Student Voice**

The School of Media created a new role arising out of the What Works? 2 interventions. The Student Success Advisers (SSA) were recruited from recent graduates and the plan was that they would provide a bridge between the course and students who may be struggling through the transition to university. They would monitor student participation and engagement encouraging unengaged students to access centralised student services and personal tutors. This proactive approach would enable unengaged students to become engaged as they would not be allowed to just drift away and leave HE (Millard et al., 2016, p. 110).

The SU was supportive of this emerging initiative as any increased support for students at risk of dropping out was considered a positive initiative, especially considering that an early intervention could increase the chances of a student staying on a course. Some challenges emerged during the course of the initiative where the boundaries between SSAs, central student services, SU and faculty became unclear. For example, the student success advisers were not skilled counsellors or well-being advisers, and this lack of professional experience coupled with an eagerness to

support students occasionally meant they entered areas of support outside their expertise. Mission drift seemed to be evident as student success advisors moved into the work of increasing a sense of belonging by organising induction and other social activity, sometimes contradictory to central efforts and pulling students away from mixing with other areas of the university.

From a SU perspective, the SSAs could be seen to be engaging with students on improving the learning experience, but this appeared to divert the student voice from the Student Representative System. The SSAs reported directly to their schools and there was no mechanism by which the university could be held to account. A further challenge emerged from the student leaders who felt their roles and responsibilities were being replaced by the SSAs and that appeared to be fundamentally at odds with the aims of the student representation system.

However, the partners worked together as the SU questioned the implications of the role and sought definition. The SU recognised there were numerous benefits to the SSA role as they had the capacity to support (and often lead) student academic leaders in encouraging students to attend student feedback systems. Furthermore, there are examples where circumnavigating the student representation system meant for a more timely resolution on an acute situation. Moreover, the SSAs developed a useful and progressive community of practice which helped identify emerging trends across faculty on the student learning experience that could be fed into the representation system (Millard et al., 2016, p. 108). This partnership pedagogy (Mercer-Mapstone & Abbot, 2020, p. 109), in which students and staff and the organisational structures that represent them, collaborate for mutual benefit and challenge, continues to evolve and develop through curriculum and wider engagements.

## Resourcing Diverse Student Needs

The What Works? findings, as detailed previously in the chapter, reference that, to increase a sense of belonging, retention and satisfaction, the activity predominately should take place within the academic sphere. There is an implication that failing to migrate key aspects of the social

and service student experience into the academic sphere may lead to student avoidance. It could create the perception that if the academic staff do not value the issue enough to engage within it in the course, then clearly it is not of sufficient value for students to want to engage.

While the What Works? 1 research evidences the academic sphere being the primary focus for a sense of belonging, the BCU partners would argue that the balance between the academic sphere, social and service needs to be carefully aligned. Following the What Works? recommendations, this institution, along with many others, focused on student engagement in the academic sphere and, as a result, invested resources into that work. There was a logical argument being that this was where impact would be most successful and where there would be a greater return on investment through enhanced retention and student satisfaction.

One element of this work has seen a refocusing of estate developments on the key aspect of delivering the academic experience; classrooms, social learning space, libraries, labs and studios being the priority. The SU had argued for a proportional resource allocation according to needs to be given to the social and service spheres. For example, faith on campus is important to many students and the practising or sharing of faith can bring staff and students together. This sees the creation of sub-communities that foster a sense of belonging through faith and shared values. Lack of investment in such faith spaces can lead to tensions as students do not believe that the university sees such provision as a priority. For a university like BCU, where over 50% of students are from a Black or minority ethnic background and the diversity of that population requires suitable spaces to respect their faith, this can be a pressing issue. Baron and Corbin (2012, p. 766) support this hypothesis, citing that student experience as a whole is the key to engagement and thus efforts to re-engage students cannot be successful until a whole institution approach is adopted, as 'research has linked positive academic engagement with social engagement and noted that students do best where they have a sense of belonging to their university'.

## An Employability Challenge

The maturity of the partnership between the university and SU can be expressed in both the alignment of strategic aims and, perhaps more importantly, in how this was realised. In 2016, the SU undertook a consultation exercise with students during the development of its strategic plan. In that consultation, 96% of students expressed the view that employability should be one of the top priorities for the SU (BCUSU, 2017). This was a surprise for the SU, but it was confirmed through focus groups and it started to seek a mechanism for delivery. The SU's belief was that the university was better placed to provide employability development within the academic sphere and that it would be inefficient to duplicate activity that was already embedded in university teams such as careers.

Graduate+ was developed, in collaboration with the SU and other university partners, to provide an extra-curricular awards framework that students could utilise to design their own learning paths. The success of the programme has seen it become the first employability award to be endorsed by AdvanceHE and annually results in 10,000 students participating in extracurricular activities on campus. It offers a return to the original theme of partnership around developing a sense of learning community and has seen significant benefits for the partners. When the Students' Union saw Graduate+ struggling to find an office location on campus, it proactively stepped in and offered a prime office space as it could see the potential benefits.

The strength of the Graduate+ initiative is that it builds on the coherent message of student engagement, retention, employability and partnership. The design sees students required to undertake 12 basic activities in year one to gain the bronze award. These activities, such as meet your personal tutor, join a society, and library induction, recognise student participation in university life. It enables students to engage with 12 possible opportunities to make a connection that will support them through their first-year journey. The scaffolding this offers students can be vital as it provides an opportunity to integrate learning and fun through

participation in activities that help students feel they belong as a member of the university society (McMillan & Chavis, 1986).

From the Students' Union perspective, the opportunity arose around how could this vehicle support recruitment for SALs or the engagement with clubs and societies and SU events. It also provided a vehicle for the SU to engage with the academic sphere (Thomas, 2012) through participation in Graduate+ weeks where students are directed by course teams to engage in specific activities that support their learning. Graduate+ has been in operation for three years and the partners believe that, as it continues to evolve, it will provide an extremely effective vehicle for student engagement that enhances a sense of community and belonging.

## Conclusion

The value of partnership approaches is often difficult to measure. The improvement in relations and the willingness to work together to deliver activities does not have a number attributed to it. However, in this instance we believe that we can measure success of the partnership. At a local level, the What Works? 2 partnership work saw a 7% improvement in first-year retention in the School of Media (Millard et al., 2016, p. 107). Institutionally the partners can point to the UK's National Student Survey (NSS). The initial mission of the partnership was to create a greater sense of learning community. Through a consistent and coherent approach, in which engagement and improving the student experience have been key threads that ran through all partnership activities, the NSS has revealed some positive outcomes. The results for the Learning Community section show that the university has over the past two years (2018 and 2019) scored 5.1% and 3.2% above the national benchmarks in this section of questions. For a non-residential city-based university, with two thirds of students being commuters, this is an outcome over which the partners are justifiably proud and one in which they believe helps students have a more engaging learning experience.

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# 9

## Improving Student Engagement, Retention and Success in Online Learning

Cathy Stone

### Introduction

Australia has a long history of distance education, which traditionally was delivered to students in regional and remote parts of the country. However, the way in which this is delivered, as well as the student cohort, has changed considerably over the past 20 years or so. What used to be known as ‘correspondence’ education, through posted material such as recorded lectures, hard copy notes and readings, has been replaced by online, digital delivery of course content via the internet. While a higher proportion of regional students study online (31.29%) than do metropolitan students (16.75%) (Pollard, 2018), the total number of online

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metropolitan students is greater than that of online regional students, given that regional students comprise less than 19% of all Australian university students (Australian Government Department of Education, Skills and Employment [DESE], 2019).

Within this chapter, the term online learner refers to those students enrolled in higher education in a distance or external mode, with learning content delivered online. As such, many may not be required to attend any face-to-face learning experiences throughout their entire degree program, while some may be required to attend occasional sessions on campus, or professional placements in a workplace. Many may also be required to be physically present to sit examinations. However, for the most part, these students are studying away from campus, at their computer or other digital device, not physically attending classes. Massive open online courses, or MOOCs, refer to open-access courses that are delivered free or at low cost potentially to anyone, anywhere, provided they have access to the internet. They can be stand-alone non-accredited courses or included as a component of an accredited university course. Online learners may at times be undertaking a MOOC in association with their university studies.

The continued advances in technology that have simplified the digitalisation of learning content, along with the growing competitiveness of universities, has led to more institutions than ever before offering online courses at undergraduate and higher degree levels. Universities generally market online study as a more flexible and manageable option for students who may find it difficult to attend classes due to factors such as distance or lack of time, leading to an ongoing rise in online enrolments. Australian enrolments in distance/online study grew from 17% of the commencing domestic cohort in 2010, to 25% in 2018 (DESE, 2019), a faster growth than on-campus enrolments over the same period (DESE, 2018, p. 14). Inevitably, the ways in which universities traditionally have planned, developed and delivered education are being transformed, with higher education being delivered differently to an increasingly more diverse student cohort.

This chapter explores the findings from recent Australian and international research into the online student experience, conducted prior to the 2020 COVID-19 pandemic and subsequent shift from face-to-face to

online education delivery. It focuses particularly on the Australian experience of those who choose to enrol in an online mode, examining the potential student equity opportunities that online learning can offer, to what extent these are being realised and how they could be improved. Within this context, recommendations are offered for the types of institutional strategies and practices that are most likely to improve retention and success for online learners. These recommendations are even more important in the light of the 2020 rapid expansion in online learning, which is likely to continue while face-to-face contact across educational settings and the broader community remains highly restricted due to COVID-19.

## The Role of Online Learning in Improving Student Equity

Multiple studies have highlighted that, internationally, the majority of students who choose online study are mature-aged (aged 25 and over) and managing other essential and time-consuming commitments such as paid employment and/or caring for children/family, which also impact upon their energy and finances (Bissonette, 2017; Chawinga & Andrew, 2016; Hewson, 2018; Ilgaz & Gülbahar, 2015; Moore & Greenland, 2017; Park & Choi, 2009; Signor & Moore, 2014; Stone & O’Shea, 2019a).

Within Australia, higher proportions of students from the Government-identified higher education equity categories (DESE, 2017a) have been represented in online learning. These include students from low socio-economic backgrounds, regional and remote students, Aboriginal and Torres Strait Islander students, and students with disability (Cardak et al., 2017; Halsey, 2018; Kent, 2015; Pollard, 2018; Stone, 2017). Higher proportions of students who are first in their families to enter university have also been choosing to study online than face-to-face (Stone et al., 2016). As such, online learning has been playing an important role within the Australian Government’s student equity agenda through ‘meet[ing] students where they are currently placed, allowing participation in ways

that suit the student considering their individual circumstances and the personal barriers they may have' (Dodo-Balu, 2018, p. 35).

Additionally, women have been more strongly represented within the online cohort not only in Australia (DESE, 2018) but also at universities with substantial numbers of fully online students within New Zealand (New Zealand Ministry of Education, 2017), the United Kingdom (Open University, n.d.) and North America (Athabasca University, 2019). It needs to be acknowledged that women continue to be disadvantaged in higher education by their traditional role of carer (Chesters & Watson, 2014; Mallman & Lee, 2016; Pocock et al., 2009; Stone & O'Shea, 2012, 2013). Indeed, the need to combine study with that of caring for others is a key reason that so many women have been willing to embrace online learning. It can therefore be argued that gender equity is being enhanced, as women with caring responsibilities increasingly choose 'the flexibility that online study promises...to manage study around other family commitments' (Stone & O'Shea, 2019b, p. 98).

However, these potential equity gains have been diminished by the lower student retention and completion rates compared with the performance of on-campus students (Stone, 2017). Various studies have shown that for distance, online students, retention is poorer by at least 20 percent (Greenland & Moore, 2014), with 40 percent fewer completing their degrees over a nine-year period (DESE, 2017b) and withdrawal without a qualification being 2.5 times more likely (DESE, 2017c). Many reasons for this have been expounded, such as technology challenges (Yoo & Huang, 2013), family, work and other caring commitments making it difficult to dedicate enough time for study (Greenland & Moore, 2014; Ilgaz & Gülbahar, 2015) and poorly designed course materials and delivery (Devlin & McKay, 2016). Other researchers point to the importance of sufficient communication and contact with tutors and other students (Lambrinidis, 2014), including the 'presence', 'accessibility' and 'responsiveness' of the online teacher (Vincenzes & Drew, 2017, p. 13), to avoid online students experiencing a sense of isolation and 'aloneness' (Resop Reilly et al., 2012, p. 104).

More recently, it has been argued that lower retention and completion rates are connected as much with the nature of the student cohort, or in fact a lack of understanding of this cohort, as with the different mode of

delivery per se. A number of studies have stressed the importance of recognising the diversity of the online student cohort, contending that only through ‘recognising, understanding and valuing this cohort’ (Stone & O’Shea, 2019a, p. 66) can an equitable experience be achieved. If institutions expect this cohort to be largely the same as that on campus, there are likely to be ‘gaps between expectations and delivery’ (Hewson, 2018, p. 10) on both sides. For example, Hewson (2018) proposes that ‘a *dominant* [sic] student identity... is not realistic for online students’ (p. 11) who ‘cannot prioritise their student identity over their work identity’ (p. 10) while Devlin and McKay (2018) highlight the ‘subculture expectations and rules’ within universities that may not always be ‘clear to online students’ (p. 161). Understanding the ‘important fundamental differences between on-campus and online learners’ (Moore & Greenland, 2017, p. 57) is therefore a prerequisite for designing teaching, learning and support strategies that will effectively engage and support these students.

In looking at the role of MOOCs, there is some evidence that, where they are designed and offered as no-cost, open courses that help to prepare students for more formal studies through such means as improving language and literacy, raising confidence in study skills and providing tailored learner support in specific subject areas, they may also contribute towards student equity. A review of research into the student equity and student inclusion benefits of MOOCs over the five-year period of 2014–2018 concluded that ‘MOOCs and contemporary open education programs that aim to enable improved student equity and social inclusion are an active global and multi-lingual phenomenon’ (Lambert, 2020, p. 13). Those most effective at enabling student equity and/or social inclusion were ones which had been developed by ‘organisations and educators with a remit or passion to widen participation... [designing] programs with particular disadvantaged communities and cohorts in mind, adopting the MOOC platforms and similar technologies in more developmental, supportive and equitable ways’ (p. 14). The design principles that tend to be used in the development of MOOCs have also been found to be appropriate for ‘facilitating and encouraging cultural inclusion in their specific learning spaces’ (Marrone et al., 2013). The other side of the picture however is that MOOCs have in many cases become

more commercial, with a 'shift from free to fee-paying offerings' (Lambert, 2020, p. 2) and even those which remain free are, by themselves, 'unlikely to provide dependable accreditation' (Productivity Commission, 2017, p. 98) unless they are incorporated, possibly as a micro-credential, as part of an accredited learning package (Zacharias & Brett, 2019, p. 12).

## Why Study: And Why Online?

Findings from research with mature-aged online students over the past decade have revealed that the motivation for studying at this stage of life is generally linked to the student's desire to improve their earning capacity, to progress their career and achieve a better quality of life for themselves and their families (O'Shea et al., 2015; Stone et al., 2016). For the many women who choose to return to study as mature-age students, key reasons include 'to gain or improve employment to increase their income, to support themselves and their children... with major family events such as having a child, or children leaving school, being significant catalysts' (Stone & O'Shea, 2019b, p. 102).

The need for flexibility in their studies has been shown to be a key motivator for women choosing to enrol as an online student rather than attend campus, in order to balance their other 'work and life commitments' (Muir et al., 2019, p. 270). Quotes such as, 'I choose to study online because I work, all shift work [and] I have a six- and eight-year old child' (female online student, aged 36, in Stone et al., 2019, p. 32) and '[I can] structure the study – to suit my sort of lifestyle instead of having to make any dramatic changes to study on campus' (male online student, aged 29 in Stone et al., 2016, p. 155) are typical amongst many. Other studies have found that not only 'work/balance issues' but also 'money concerns' are 'factors in the forefront of the participating students' minds' (Hewson, 2018, p. 10) when they choose to study online, with fewer costs to be expended in travel and lost work hours (Michael, 2012).

Given the particular demands that so many online students are dealing with, such as lack of time, other life responsibilities and often tight finances, it is perhaps not at all surprising that student attrition is higher for this cohort. In the face of the competing priorities of work, family and

study, it is study which will inevitably be sacrificed as the least essential of these three, should the balance become unmanageable. It is therefore of the utmost importance that institutions pay sufficient attention to engaging and supporting these students, not only at the time of first enrolment, but throughout the entire length of their studies.

## Building Student Engagement, Retention and Success

Research with students who have chosen online study, seeking to understand their views on what is important to help them to stay and succeed, has been vital in building an understanding of ways to improve their engagement, retention and success. First and foremost, as alluded to above, is the need to understand and appreciate the diverse nature of this cohort, and to pay close attention to what the students themselves regard as the key ingredients for engagement and persistence. These can be summarised as follows:

### 1. *Being known and valued for who they are*

They have no understanding of online students or how to interact with them... it's like we are an extension... I get weather updates and carpark info! (student quote, O'Shea et al., 2015, p. 41)

Online students want to feel included as equals, not to be treated as 'a lower priority than on-campus students', 'second fiddle' or 'not really having a voice' (O'Shea et al., 2015, p. 51). The overwhelming majority of online students traditionally have been aged 25 and over, yet Mallman and Lee (2016, p. 2) have argued that older students generally remain 'insufficiently understood'. Hewson's (2018, p. 36) research has highlighted the multiple identities which older, online students must maintain, and how they, by necessity, prioritise 'family first, work second and study third'. It is therefore vitally important for institutional cultures to 'genuinely and actively [value] the contribution that mature-age students

make to the institution' (Laming et al., 2016, p. 41). Examples of how this might be done include, 'acknowledging the prior experience of this cohort and the strengths they bring to their studies' (Stone & O'Shea, 2019a), adopting an institutional 'perspective that recognises... their multiple identities' (Hewson, 2018, p. 11) and, for the many women studying online, 'a simple recognition of the gendered expectations' (Stone & O'Shea, 2019b, p. 106) that will inevitably impact upon their lives as students.

## *2. Meaningful and relevant connection and communication with the institution – particularly teachers and other students*

Why should I be bothered if the lecturer can't? (student quote, Muir et al., 2019, p. 7)

A lack of communication from tutors and the absence of feedback have been revealed to be particularly frustrating and disengaging for online students. Students have talked about 'self-service units'; the 'disappearing lecturer'; 'little or no feedback, no discussion and "don't bother me" tutors' (O'Shea et al., 2015, p. 49). Conversely, students report positive engagement occurring within the context of 'a strong teacher presence...[with] regular and prompt communication between teacher and students' (Stone & Springer, 2019, p. 64). This includes the tutor 'being available for contact' and engendering a sense of a 'reciprocal relationship' between students and tutors (Muir et al., 2019, p. 9).

Other studies have highlighted 'the tutor-student relationship' as being 'critical' to the concerns of online learners, particularly the 'interactions and relationships with their tutors – how often and how they would be able to communicate' (Hewson, 2018, p. 10); the importance of 'instructor immediacy in motivating participation' (Kuyini, 2011, p. 11); and 'relationship-building strategies' (Resop Reilly et al., 2012, p.104). Communication and feedback from online teachers have been repeatedly highlighted as being vital for online student engagement (Delahunty et al., 2014; Kuiper, 2015; Lambrinidis, 2014) with Ragusa and Crampton (2018, p. 15) for example finding that 'the quality and

timeliness of lecturer feedback was the most valued form of learning connection identified by students irrespective of course’.

The ‘presence and authenticity’ (Thomas & Thorpe, 2018, p. 6) of an online teacher can play a crucial role in building engagement and communication on a student-to-student level, by helping to ‘establish a learning climate that normalises vulnerability and enhances the students’ comfort, confidence and willingness to participate’ (Thomas & Thorpe, 2018, p. 6). Within such a climate, students are more willing to communicate meaningfully with each other, hence furthering their sense of engagement with the online class as a whole. Building social connection between students has also been shown to enhance their engagement and sense of belonging, through such means as ‘social exchanges’ with other students, including ‘assignments that required them to interact with others’ (Boling et al., 2012, p. 123) within a meaningful context related to their learning outcomes.

### 3. *Engaging learning design*

What works in person is not the same as online... I thought it would be more tailor-made for it than what it is. (student quote from O’Shea et al., 2015, p. 52)

Many students report being disappointed by the poorly designed courses and materials they are faced with, finding them difficult to navigate and disengaging. Well-established from research into online student retention is the need for ‘engaging and interactive course design’ (Stone & Springer, 2019, p. 150), with online courses designed in ways to ‘stimulate [students’] active participation and interaction and meet their expectations’ (Park & Choi, 2009, p. 215). There are many examples cited in the literature of ways this can be done, including, ‘the importance of using multimedia and of choosing formats and content that represent the students’ experience’ (Devlin & McKay, 2016, p. 98) and providing ‘opportunities for students to interact in multiple ways with their peers in an online environment’ (Shackelford & Maxwell, 2012, p. 7).



Evidence (for example, Akarasriworn et al., 2011; Devlin, 2013) confirms that practices such as recording face-to-face lectures and uploading them for online students, rather than providing specifically designed online content, provides a disengaging experience. Students report feeling most engaged and connected with their teacher, other students and the learning content when their online course provides activities directly related to learning outcomes; encourages communication and collaboration between students; takes students through assessment tasks directly related to the content; provides prompt feedback; provides both synchronous and asynchronous activities; and allows students to work ahead if they wish to do so (Boling et al., 2012; Hewson, 2018; Muir et al., 2019; O'Shea et al., 2015; Stone & Springer, 2019).

#### 4. *Proactive institutional preparation and support*

Even some who regularly used computers in other settings found learning the technology a struggle, which impacted upon their motivation, confidence and perseverance. (O'Shea et al., 2015, pp. 51–52)

Various studies (for example, Reedy, 2011) have revealed that online students want and expect some level of technology preparation for what is ahead, stressing the importance of 'robust and comprehensive instructional support systems' (Yoo & Huang, 2013, p. 160) to improve their technical competence and hence their confidence with online study.

Students are also seeking preparation in academic expectations and skills. For the many older learners who have not studied formally for some years, a lack of preparation in academic skills can be daunting. In the words of one online student: 'They came back to us and said you have all got a problem with referencing, you all need to redo your referencing for the next assessment which was another essay. They gave us no tutorial or anything' (Stone, 2017, p. 50).

There is also evidence that the isolation of online study can be alleviated through 'being offered and receiving institutional help and support' (Stone et al., 2016, p. 160), as the experience of this female online student, aged 30, illustrates:

I got an email... telling me that they were here to help... uni is hard so give us a call if you ever want a chat... and then a couple of days later I thought I'm going to call these guys. It was really helpful. I had a chat to a woman over the phone who was really great. (Stone et al., 2016, p. 160)

### 5. *A flexible approach*

People who are interstate, people on night shifts, people who can't attend school in standard hours that school is offered. It has to be flexible. (student quote in Stone et al., 2019, p. 32)

The dependence on flexibility has been raised in the findings of a number of studies with online students (Bissonette, 2017; Boling et al., 2012; Hewson, 2018; Moore & Greenland, 2017; Ragusa & Crampton, 2018; Stone et al., 2019). These older, time-poor students have chosen to study online so that they can 'study when and where they could fit it in around busy lives and other pressing responsibilities and commitments' (Stone et al., 2019, p. 29). Many express a need for 'all their learning materials to be available in advance' (Hewson, 2018, p. 5), so that they can maximise their time most effectively, to 'move ahead or catch up from behind' (Stone et al., 2019, p. 32) when they have the time to do so, rather than being forced to wait for the materials to be posted week by week.

So, if you know you've got a lot of things on, say, in week five, you can maybe put in a few extra hours in week four to listen to those lectures. Or, get some postings up early and come back and read them later the following week. (student quote in Stone et al., 2019, p. 32)

Problems have been experienced when 'instructors required students to participate in synchronous online classrooms' (Boling et al., 2012, p. 121) without considering 'if you had kids, if you were working' (Stone et al., 2019, p. 30). Another source of frustration can be 'the difficulties involved in seeking even a short extension of time, on rare occasions, due to quite rigid rules being applied' (Stone et al., 2019, p. 33), indicating a need for streamlined processes to help them manage their studies around

other unexpected demands, such as sick children or sudden work deadlines. Many students have experienced a ‘lack of consideration given to employment’ (Moore & Greenland, 2017, p. 58) with employment issues or demands ‘not perceived as valid for seeking extensions... “when I started my degree they told us that things like work would never be acceptable [as reasons for extension requests]”’ (Stone et al., 2019, p. 34).

It appears there is a lack of clarity within universities about the meaning and practical application of these terms, with flexibility ‘rarely... extend[ing] beyond the means by which students interact with staff, learning resources and fellow students’ (Todhunter, 2013, p. 240). When words such as ‘flexible’ and ‘work at your own pace’ are used to market online courses, understandably students find it a disengaging experience if they feel they are not being given the flexibility they were promised. ‘We’re being sold a product that is described as fully flexible...yet... [the university is] sort of treating it like an office-hours gig’ (Stone et al., 2019, p. 30).

## Implications and Recommendations for Higher Education Institutions

Research with online students over the past decade clearly indicates that, in a climate of continued rapid growth of online learning, institutions need to move beyond the conventional methods of external education that have been relied upon in the past. Instead of essentially trying to replicate the face-to-face learning experience at a distance, higher education institutions need to embrace the digital communication advances of the twenty-first century, to deliver online education differently and in more creative ways.

Those who choose to study online tend to possess a great deal of life experience. They tend to be older and hence have had more experience in the workplace and/or being responsible for others, such as through parenting. They are more likely to have the necessary maturity to manage complex responsibilities and tackle unfamiliar situations. The other side of the coin is that they may lack confidence and academic experience,

perhaps coming back to study after a lengthy gap, or from family backgrounds where no one they know has been to university. It can be a considerable challenge for institutions to create a learning environment that encourages and supports these students to persist and succeed.

As discussed earlier, multiple research studies with online students indicate that they want to feel valued by their institution; they express a desire for strong connections with teachers, with other students and the institutions in which they are studying; and they want to be treated as adult learners through a more flexible approach to both the delivery of learning content and the application of student policies and processes. They also expect an engaging and interactive digital experience, similar to the sophistication of social media platforms and commercial online sites that they are used to. If instead they encounter a poorly designed online learning experience, they are less likely to engage with it or to want to interact.

Staff involved in the design and delivery of online education at a grassroots level are also generally very aware of what constitutes an engaging online student experience. Findings from a national study with Australian universities that interviewed a range of staff involved in the design and delivery of online education (Stone, 2017; Stone, 2019) demonstrate many commonalities and similarities between the student and staff perspectives:

Specifically, there are very similar views on what needs to be done to engage online students, to help build their sense of belonging within their studies, and to help them succeed academically. (Stone, 2019, p. 8)

This is a reassuring discovery and one that indicates the value for institutions in also consulting with their expert staff – those who teach and support students directly and those who understand how to design specifically for online education.

From this and other research (Canty et al., 2015; Delahunty et al., 2014; Downing et al., 2019; Parsell, 2014; Reedy, 2012) some key recommendations are offered here for ways in which institutions can better address the needs of online students.

1. Build students' sense of belonging and of being valued by their institution, through an institution-wide approach to online learning, in which the university as a whole recognises and treats online education as core business, not simply an add-on. This includes establishing quality standards for online education as well as understanding the nature and diversity of the online student cohort, in terms of both its strengths and its needs.
2. Improve communication between students and the institution through intervention programs that make early contact with students and maintain meaningful connection throughout their learning journey. Examples include outreach phone calls, comprehensive orientation delivered remotely and/or face-to-face in regional centres, contact with student advisors and student mentoring programs.
3. Value and support a strong teacher-presence, recognising the time and energy required to teach effectively and sustainably online, in ways that encourage students to persist and succeed. This has implications for university workload models, with the need for a realistic assessment of teaching hours required for online teachers to effectively engage and interact with students, to build interaction throughout the length of the course and, equally importantly, to prevent teaching staff from becoming overloaded and disaffected.

It's very time-consuming and tutors aren't paid for it, for that amount of time. We're not supposed to spend a lot of time on it. You're always chasing your tail because there's just not enough time. (lecturer quote from Stone, 2017, p. 37)

This latter concern has been shown to be particularly acute for sessional or casual staff, with 'a lack of opportunities for casual staff to develop their professional skills...[and] personal goodwill rather than institutional strategy...used to ensure the quality of teaching' (Dodo-Balu, 2017, p. 11).

4. Design for online, to ensure that course design engages students with their learning, connects students with each other and with the teacher, encouraging interaction, collaboration and communication. Accessibility and inclusivity are necessary features of effective learning

- design, to recognise and value the diversity of backgrounds, skills and strengths that these students bring with them to the virtual classroom.
5. Prepare students effectively for academic expectations and support them with their ongoing learning. This requires collaboration across the various divisions, departments, faculties and schools, to embed preparation and academic skills' support as much as possible within the curriculum. There has been previous recognition of the importance of embedding support within face-to-face curricula, through academic and professional staff working together to achieve this (Kift et al., 2010). For those studying online, without access to on-campus support services, this is even more crucial. MOOCs can play a role here, with a number of universities developing academic preparation MOOCs. These are aimed particularly at 'learners with low skills, low confidence, and/or low levels of previous education' (Lambert, 2020, p. 7) and offered by some Australian higher education institutions (see for example, University of Newcastle, 2020).
  6. Ensure other support is delivered as needed, such as interventions that reach out to students at appropriate times. Data on student activity and behaviour within the learning management system (LMS) can inform ways and times to contact particular students or student groups (Johnson et al., 2016; Sclater et al., 2016). An Australian Government report (DESE, 2018, p. 24) has found, 'there is widespread acceptance that learning analytics, if implemented effectively, is a valuable tool for addressing student retention'. Again, collaboration is required to ensure holistic support through, for example, embedding online resources and joining up academic and support staff to work together (Slade & Prinsloo, 2015). Remote access to support services such as personal counselling, mental health services, disability and career services, is also required. Instead of largely operating face-to-face in normal business hours, remote and out-of-hours availability for online students needs to be assured.
  7. Provide sufficient flexibility in university policies to ensure that online students are not disadvantaged. Student processes and protocols need to be appropriate for online learners rather than being 'designed for traditional on-campus students without adequate adaptation for the online learner' (Moore & Greenland, 2017, p. 5). Flexible access to

learning materials assists students to make the best use of their time, to fit their studies in and around busy lives. It is important to recognise the 'after-hours' nature of online study for many, including how difficult it can be to attend synchronous activities, or to meet inflexible cut-off dates/times for class contributions and other tasks. Allowing greater flexibility for staff in their responses to student requests and circumstances allows for a more individual, caring approach, in which students are more likely to remain engaged and connected with their studies.

## Conclusion

To encourage greater retention and success, online education delivery requires something more than simply digital delivery of face-to-face content. It requires a whole-of-institution approach to develop the potential of both people and technology. Distance students, studying online, may not be physically present but should certainly be kept 'visible', not only by those who are teaching or supporting them, but also by the institution as a whole, at all levels. This visibility includes a recognition of the skills and strengths that online students bring with them to university and the challenges they may face in combining study with their other multiple responsibilities. It also allows for a more differentiated approach that engages and encourages this diverse cohort of students to persist and succeed: an approach that provides the flexibility that online students are seeking; ensures that learning materials are interactive, engaging and relevant; delivers targeted support that is practical, timely, relevant; and offers meaningful communication that builds a sense of belonging and a desire to persist. Through such an approach, universities can ensure that online students, their varied circumstances, strengths and needs, are recognised, appreciated and ultimately supported to maximise their persistence and success.

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# 10

## Fostering Equitable Access to Employability Development Through an Institution-Wide, In-Curricular Strategy

Dawn Bennett

### Chapter Summary

This chapter describes the development and incorporation of a strength-based, in-curricular and whole-of-institution approach to employability development. The chapter explores some of the prevailing challenges for scholars who seek equitable approaches to student and graduate success. It then describes the experience of implementing a whole-of-institution approach within the existing first-year curriculum with a view to a phased roll-out over the subsequent three years. The chapter ends by reviewing the lessons learned and highlighting the factors which might enable similar initiatives elsewhere.

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## Framing Graduate Success

The question of how to prepare higher education (HE) students for employment is at the forefront of higher education policy and practice. In contrast, the labour market is increasingly dominated by multiple, impermanent roles rather than employment with a single employer. Labour market characteristics indicate that if graduates are to *earn* a living, they need to have learned how to *think* a living. They also need to know how to think beyond a single economic sector or career and to negotiate a labour market in which disadvantage, and multiple disadvantage in particular, is not necessarily ameliorated either by successful entry to higher education or the successful completion of a programme.

The COVID-19 pandemic of exacerbated labour market uncertainty and increased the competition for work. The lessons of previous recessions highlighted that the burden of these changes would be felt most keenly by students and workers with disadvantage (see Cockx, 2016). Similarly, the macro-economic shock of disruptors such as disease adversely affect less developed nations and the most vulnerable populations. As such, Harvey (2020, para. 6) was quick to point out that ‘the student equity gains of the past decade’ would be endangered without specific programme funding.

Even prior to the pandemic, increased diversity and growth of the HE student population posed considerable challenges in terms of student success and the equity of graduate outcomes (Pitman et al., 2019). Students from disadvantaged groups experience higher rates of attrition and deferral (Pitman et al., 2019) and they are less likely to have sufficient knowledge and awareness of contemporary employability and career construction (O’Shea, 2019) or the social capitals on which much work is secured (Britton et al., 2016; Tomlinson, 2012). Morley’s study of graduate employers finds that employers’ increasing emphasis on capabilities and experience beyond the degree – the ‘homogenised signifiers of worth’ – create ‘ideal preconditions for the reproduction of elitism and inequalities’ (2007, p. 194). These issues combine to illustrate a gap still to be addressed in either policy or practice (Li et al., 2017; Li & Dockery, 2015).



This chapter is concerned with inequitable access to employability development within higher education studies (see Nerlich, 2013), which among students with disadvantage decreases the likelihood of student success (Clayton et al., 2018) and equitable graduate outcomes. The chapter reports the operationalisation of a data-driven and responsive strategy through which institutions might help to prepare a diverse student population for success in both their studies and their graduate life and work.

The need for such initiatives is also apparent within HE policy and funding mechanisms, which tend towards neoliberal, reductionist indicators of performance and conflate *employment* and *employability*. In Australia, the Federal Government's *Driving Innovation, Fairness and Excellence in HE* (Department of Education and Training, 2016) asked the HE sector to attend to fairness and equity by developing innovative, evidence-based and research-led approaches to employability development. This aligned with a call for graduates who are entrepreneurial, creative, responsive to change and engaged in learning (Innovation and Science Australia, 2017) – a broad and inclusive remit at odds with the measurement of graduate success as employment.

Higher education institutions globally have responded to both similar policy emphases and the needs of diverse student populations by creating multiple employability development opportunities (EDOs), often aligned with retention and student success. These initiatives typically include work-integrated learning and experiential learning programmes (Freudenberg et al., 2011), co-curricular employability awards, leadership and study abroad programmes, and in-curricular, credit-bearing employability strands (Pegg et al., 2012).

The implementation of employability initiatives presents multiple challenges, not least of which is persistent ambiguity about how employability should be defined and how and when it should be measured. Although internal and external stakeholders often voice differing perspectives on employability, they tend to agree that there is limited value and practicality in delivering a standard suite of 'soft skills' (better termed core capabilities) across multiple, specialised programmes (Barrie, 2006; Gracia, 2009; Jackson, 2014; Kalfa & Taksa, 2015). How, then, might EDOs be structured to enable equitable student and graduate success?

The best-resourced and most meticulously designed EDOs have little value unless students and faculty engage with them regularly. And yet many students fail to see the relevance of EDOs and many more are so ‘time jealous’ (Billett, 2015) that they need to make strategic decisions about how to spend their limited time; co-curricular (extra-curricular) activities for which no course credit is awarded tend not to be privileged in these decisions (see Andrewartha & Harvey, 2017). Added to this, Morrison (2014) finds that students from low socio-economic backgrounds tend to view their degrees as providing specialist knowledge rather than knowledge and skills which might be transferred to multiple settings. Similarly, time-poor and increasingly hourly-paid academic staff have insufficient time, resources or expertise to include what they see as ‘yet another’ thing in an already over-crowded curriculum. The term for fear of overcrowding the curriculum is *anupholsteraphobia*. That such a word exists illustrates the legitimacy of their fears.

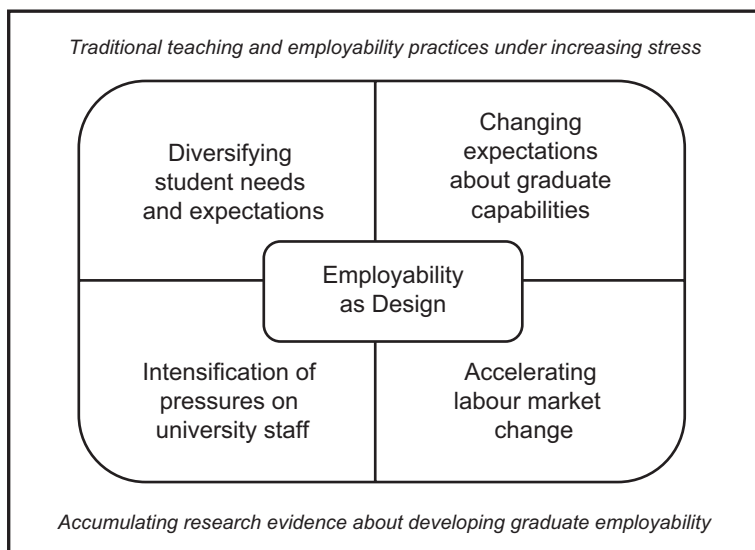
The response of one university to the challenges outlined above was to develop and embed, in the existing curriculum, a data-driven employability development strategy which would engage every student from the first year of study. Co-delivered by academic staff and career practitioners, the team defined employability as the ability ‘to find, create and sustain meaningful work across the career lifespan and in multiple settings’ (Bennett, 2019, 2020). The strategy utilised Bennett’s (2019, 2020) ‘employABILITY thinking’ approach, which is a strength-based, metacognitive approach to employability development. Grounded in socio-cognitive theory, the approach prompts students to understand why they think the way they think; how to critique and learn the unfamiliar; and how their values, beliefs and assumptions can inform and be informed by their learning, lives and careers. The strategy’s goals were threefold:

1. To create a whole-of-institution intervention which would ensure equitable access to career development learning (CDL) for all students by embedding it within the existing curriculum and negating the need for additional time, resources or educator expertise.
2. To build strong relationships between the institution’s careers service practitioners and academic staff and curricular leaders.

3. To inform the timing, content and delivery of student support initiatives, including those focused on employability, retention, student success and equity.

## Employability as Design

The challenges inherent in operationalising employability are well documented. To overcome them I devised a design-centric approach to employability development informed by Goodyear's (2015) 'design for learning' model. Shown at Fig. 10.1, the model illustrates the four forces which impact contemporary higher education adapted to the context of employability development. The challenges outlined in the following section were identified, and solutions proposed, using this design-centric approach.



**Fig. 10.1** Employability as design (Bennett, 2019b, p. 51). (Adapted from Goodyear (2015))

## The Challenge of Reaching Every Student

The delivery of employABILITY thinking was informed by Holmes' (2013) employability models, through which the orientation of contemporary initiatives can be understood at the institutional level as *possessional* (possession of employability attributes), *positional* (the use of existing capital) and *processual* (a focus on the developmental process). Analysis of key stakeholder perceptions (Smith et al., 2018) and EDO descriptions on institutional websites (Bennett et al., 2017) suggests that the most common graduate employability orientation is possessional. This is unsurprising given its alignment with current policy and the focus on graduates possessing the skills, abilities, or characteristics needed for employment. The responsibility in this approach, however, can lie primarily with students.

The operationalisation of contemporary employability initiatives can be similarly categorised using Farenga and Quinlan's (2016) employability approaches of *portfolio*, *award* and *hands-off*, and Bennett et al.'s (2017) *non-embedded* approach. These are summarised below.

- In a *portfolio* initiative, students are offered a portfolio of curricular and co-curricular employability development opportunities delivered by both academic staff and central services; these tend not to be connected as a single initiative.
- *Award* initiatives feature a formal credential which often combines academic and careers programmes and leads to a certificate or second academic transcript.
- A *hands-off* initiative assumes that capabilities such as problem solving, communication skills and leadership develop naturally through academic programmes. Students in a hands-off context need to identify the gaps in their capabilities and then seek help, often through a careers service that has little involvement with their programmes. The hands-off approach aligns with Holmes' *positional* orientation in which individuals are expected to leverage their existing social and cultural position and its influence on their ability to access the labour market.

- *Non-embedded* approaches are a hybrid of portfolio and hands-off initiatives. They are less accessible to students from disadvantaged backgrounds because of their reliance on students to recognise their developmental needs and set aside time to access help.

Hands-off initiatives, most prevalent among older, research-intensive universities (Divan et al., 2019) are arguably the least successful in engaging students from disadvantaged backgrounds because their positional orientation privileges students 'whose backgrounds are already privileged enough to have tacit labor-market awareness, networks, and cultural capital' (Farenga & Quinlan, 2016, p. 10).

The responsibility of employability development varies greatly in the above approaches, with the co-curricular and hands-off approaches placing much or all of the responsibility on students. In the labour market, too, the balance of responsibility for career progression and learning is shifting from employers to individual workers (Potgieter, 2012, p. 2), who can find themselves isolated from supervisors and peers, expected to perform management tasks and needing to balance multiple roles from the point of graduation. The shift in responsibility explains in part why industry can be critical of universities for not providing graduates who are 'oven ready' (Brumfitt, 2004) for their specific context. However, Crebert et al. (2004) find that when industries relegate developmental responsibility entirely to institutions and fail to acknowledge that graduates face a learning curve as employees, graduates' confidence is negatively impacted. This relegation benefits no one because confidence and self-esteem are positively associated with graduates' ability to be proactive and successful in their career management (Potgieter, 2012).

It follows that from educational, labour market and equity perspectives, higher education students need to learn how and what to learn, and how to manage their graduate work and learning. As Goodyear (2015, p. 45) emphasises, a lifelong learner knows 'how to design for one's own learning [and] how to create better environments in which to think for a living'. In approaching employability as design, the *processual* orientation emerges as distinct from other approaches because it moves beyond skills and positionality to highlight the relationship between the integrative and continually interactive process of employability development.

I concluded that the processual orientation has the greatest potential to be equitable, but only if it is delivered within the curriculum so that it engages all students and develops both metacognition and individual agency.

## **The Challenge of Embedding Careers Expertise in the Curriculum**

A prevailing challenge to equitable employability development is that career practitioners, the experts in career development learning (CDL), are most often professional staff whose work occurs largely or even solely within the co-curricular space. At the same time, non-expert faculty who realise the importance of introducing students to 'the real world' deliver aspects of CDL without the support of these expert peers.

A second feature of non-expert (faculty-led) CDL delivery is its vulnerability. Non-expert CDL tends to form part of an informal curriculum. Examples include a guest speaker or alumni panel, reframing an assessment task to give it a professional orientation, and impromptu discussions relating to career and industry. Students experience informal CDL alongside the informal curriculum of social and community interactions (Kift & Nelson, 2005), in which contexts they begin to make sense of themselves and their studies. By definition the informal curriculum does not appear on a unit outline and is not explicitly assessed. As such, it relies on the educator who devised it, it impacts limited student cohorts and it disappears when the educator no longer teaches the class.

Inexpert CDL also risks negatively impacting student well-being and motivation: telling piano performance majors that they have a 1:100,000 chance of securing a full-time performance career is unlikely to elicit more than demotivation or a retreat to the practice studio. There is a need, then, to engage career practitioners such that the efforts of academic staff are supported and students can begin to position themselves for the future.

An equitable approach to employability and CDL would engage all students, enlist the expertise of career practitioners, link with centralised careers supports and bring into view activities within the informal

curriculum. Interviews with the leaders of institutional careers services globally (Smith et al., 2018) reveals that career practitioners struggle to work within the core curriculum because of limited curricular time. As a result, students and faculty tend to be unaware of the careers support available, and career practitioners spend an inordinate amount of time with final-year students who are in a pre-graduation panic. Our hypothesis was that if all students were engaged in CDL from the first year of study, career practitioners would eventually spend less time with panicked final-year students and more time in the core curriculum. Further, I needed to align EDOs with the curriculum such that they would entail doing things differently rather than doing more.

## The Challenge of Understanding Student Needs and Perceptions

Data on, and from, university students is a primary source of university intelligence and an arbiter of national quality assessment (Williams, 2014). It follows that students suffer from survey fatigue (Klemenčič & Chirikov, 2015; Porter, 2004). Klemenčič and Chirikov (2015) find that student survey fatigue results in low response rates and in careless or inaccurate responses – Porter (2011, p. 45) goes as far as to suggest that ‘the typical college student survey has minimal validity’. Klemenčič and Chirikov (2015) add that student surveys are also inherently biased due to the ‘underrepresentation of disengaged, non-traditional and minority students’ (2015, p. 372). An obvious reaction to these concerns is to heighten response rates; however, Fosnacht, Sarraf, Howe and Peck (2017, p. 22) conclude that the reliability of student survey data differs little with response rate and suggest that the focus should move away from response rates and towards the more effective use of student data.

One of the contributors to survey fatigue is that students rarely see the results of student surveys and they rarely benefit directly from surveys such as those delivered at the end of a unit of study. A data-driven solution to employability, then, requires a way of amassing student data at scale and in such a way that it has a direct benefit to students both as a developmental or learning gain and as the recipients of more targeted

interventions, supports and/or pedagogical renewals. The strategy's data-related goals were therefore defined as follows:

1. To amass data in a way that has a direct and tangible benefit to all students and enables targeted interventions within the same study period.
2. To create longitudinal data with which students can review the changes in their thinking about learning and career and compare their thinking with that of their peers.
3. To create longitudinal data with which curricular and other leaders can inform curricular review, student needs and factors relating to retention.

Rejecting the idea of a traditional survey, the focus moved to what students might gain from the task of providing their responses. The solution came in the form of the employABILITY online self-assessment tool with which students can create a formative, personalised profile report with embedded developmental resources. The tool ensured that students would gain immediate benefits from their engagement whilst generating data which could enhance their student experience, help to support retention and success, and inform longer-term curricular transformation. This was supported, in turn, with multiple educator resources which enabled educators, researchers, career practitioners and curricular designers to scaffold student learning within a single study period.

## The Process

The employABILITY thinking strategy was made available as an open-access resource in 2018 and attracted attention from multiple institutions internationally. The strategy features an online self-assessment tool and dedicated websites for students and faculty containing developmental resources. Using the tool, students assess their confidence in relation to their self-management, career decision-making, self-esteem, academic self-efficacy, identity construction, the citizen-self, emotional intelligence, and perceived learner and graduate attributes. Students also



respond to optional open questions relating to their work and study backgrounds, career intentions, choice of major and their current courses (programmes). The intention is that students revisit the tool in each year of study. The approach is used primarily as an educational resource. It also forms the basis of an established programme of research; however, students decide whether to include their responses to the tool in the research database.

In 2019, the university at which the strategy had been developed rolled it out to all first-year students (approximately 11,000 in number) with the intention that it would extend engagement to second-year students in 2020 and to third- and then fourth-year and graduate students in subsequent years. The basis of the roll-out was that it could be incorporated within existing curricula and that lecturers would not need to find any extra time, resources or expertise. These claims had yet to be proven!

The process of engaging every first-year student, their educators, career practitioners and other support staff, is summarised below and then described in more detail.

- Identify the most appropriate first-year unit (semester-long course/module)
- Schedule the [online student self-assessment tool](#) as a required reading or in-class activity, engaging the relevant careers practitioner
- Register the unit to enable an educator report for each unit cohort
- Identify and embed an employability touchpoint
- Review the student data via the educator report and upload student/educator resources (e.g. from employABILITY sites and the careers service)
- Revisit the data and reports with students (e.g. as a discussion)
- Note the key findings for future iterations and curricular renewal
- Review, adapt and embed the approach for successive study periods.

## Identifying the Most Appropriate Unit

First-year curricular have the greatest prevalence of foundation or common core units: semester-long courses or modules which engage entire

discipline cohorts. I began by identifying the foundation units within each Faculty and added units for students who were not otherwise captured. Foundation units included foundations for professional health practice, a common core introductory business unit, and generic humanities and science units focused on academic and professional communication. Students not engaged in the common core units included those in geology and design. The careers practitioners were engaged in each step of the process, enabling careers expertise to be embedded within the curriculum.

## **Scheduling the Self-Assessment Tool**

The most difficult challenge was convincing academic leaders and educators that the strategy could be embedded without finding more curricular time. Once stakeholders understood how the touchpoints worked and how the self-reflection tool could be embedded (most often as a required reading), there was broad acceptance and increasing enthusiasm. I first reviewed unit outlines and decided when students would create their personalised employability profiles using the online self-assessment tool. The tool, which is embedded in an online learning space developed for the purpose, was assigned as either a required reading or as a replacement for an existing in-class activity. A link to the tool was uploaded to the learning management system (LMS) together with a link to the careers service, ensuring that the latter was visible to students from the first year of study.

## **Registering the Cohort to Enable an Educator Report**

Realising the need to communicate top-line findings clearly and simply to educators, in the development phase I asked academic staff and curricular leaders what they would most like to know about their students' thinking; I added to these two priorities relating to the measurement of graduate employability. To enable the educator report, I generated a simple registration process. This generated a cohort code which students select when completing the tool.

The educator reports illustrate student confidence in relation to the following points. The reports summarise students' responses as a cohort, in comparison with all other respondents to the tool, and in comparison with all other students in the same year of study.

- Ability to articulate their strengths and how these can be deployed in their career
- Belief that their degree programme is preparing them to meet the realities of graduate life
- Confidence in their abilities to solve problems and make decisions
- Proactivity and initiative in achieving goals, tasks or deadlines
- Self-esteem and academic self-efficacy
- Confidence that they can manage stressful, difficult and upsetting situations
- Confidence that they can make informed, career-related decisions
- Belief they will cope if their first career choice does not work out; whether they have or can create a back-up plan.

## Identifying and Embedding an Employability Touchpoint

Pitman (2016) asserts that self-assessment is the best measure of employability, criticising assessments based on graduate employment rates given that employability does not necessarily equate to employment. I note, however, that when Jackson (2014) traced the impact of assessable self-reflection tasks for students at different stages of their degrees, she found that the tasks increased students' confidence in their employability but not the alignment of their perceptions with those of industry. To be effective, core capabilities must be taught explicitly, as methods that can be translated into tasks in the workplace (Helyer, 2011; Winstead et al., 2009). To ensure that students benefit from the requisite self-aware learning, self-reflection, and the ability to recognise and benchmark their progress in developing employable skills (Daniels & Brooker, 2014; Pitman, 2016; Spence & Hyams-Ssekasi, 2015; Winstead et al., 2009),

core capabilities must also be integrated throughout the student lifecycle alongside a process of critical self-reflection through which students explore their vocational, self- and social identities. This thinking is not without precedence: Clayton, Wessel, McAtee and Knight's (2018, p. 431) US analysis of the influence of a career intervention programme on graduation rates found that 'career intervention participation was a statistically significant indicator of 1-year retention and 4-year graduation rates for students regardless of race or gender'. Similarly, Reardon et al. (2015) found a statistically significant relationship between participation in career development learning and graduation within four years of commencement.

I made employability development explicit by identifying in each unit a 'touchpoint' at which an existing task was reoriented as an explicit employability task. The most common touchpoints were group assignments, which were re-oriented as teamwork and scaffolded with teamwork resources; assessment feedback, which was re-oriented and scaffolded as the ability to give and receive effective feedback; reflection tasks, which were re-oriented as critical reflection and scaffolded with critical reflection templates; and site visits or guest speakers, which were scaffolded with informational interview techniques and/or the requirement to 'create a ticket' containing the three questions to which students most wanted an answer. Touchpoints emphasised that employability can be embedded by doing things differently rather than by doing more.

The benefits of EDOs can be realised unequally by students, and the integration of employability enabled us to negate this risk. An example of unequal benefits is given by Riebe et al. (2013), who examined the extent to which students perceived their employability skills had benefitted from the opportunity to listen to, question and network with a guest speaker. The researchers found that Australian students, whose culture emphasises the value of self-confidence and collaboration, reported greater benefit than did international students whose cultural background emphasises respect for authority and are thus less likely to ask questions. A scaffold such as the employABILITY 'ticket task', through which students create an event ticket by preparing three questions based on what they would like to learn, prompted students to align existing activities with their CDL and encouraged them to voice their thoughts. Winstead et al.

(2009) add that incorporating workplace behaviour and dress into sessions run by industry guest speakers helps students to develop a professional persona and engage in networking; hence, the addition of a persona and networking resource can help students to develop their core capabilities and professional identities (see Werth (2012) for a discussion of networks and the development of social capital for students with a disability). These identities form and reform as students '(re)conceptualise their strengths, interests and goals and experience a corresponding increase in curiosity, motivation, creativity and problem-solving' (Bennett, 2012, p. 27) through repeated engagement with future-oriented thinking and action.

Similarly, Riebe et al. (2010) propose a method for structuring group-work as the explicit development and practise of workplace skills. Riebe and colleagues utilised Tuckman's method of forming, storming, norming, performing and adjourning, accompanied at every stage by assessible tasks which required students to reflect on parallel skills development such as communication and cooperation. In the same vein, I made available resources for teamwork formation and management including making SMART goals and dealing with conflict.

In each case the online tool and touchpoint was embedded within the unit plan and the timing was agreed with the relevant careers practitioner. Resources from the educator and student websites were uploaded to the LMS. An unexpected finding was that by adding links to centralised careers initiatives, faculty and students became more aware of centralised careers support.

## **Reviewing the Student Data and Revisiting the Findings with Students**

Within three weeks of tool completion, the unit coordinator/lecturer and careers practitioner received an educator report containing top-line results. The educator reports enabled us to see where students were most and least confident and they informed learning and teaching enhancements within the same study period. We explored individual and cohort-wide findings and identified extra resources for students, which were

uploaded to the LMS. In some cases we used anonymised student data to transform previously generic ‘careers’ workshops or scheduled discussions into targeted learning environments in which students explored individual and cohort findings and participated in developmental activities supported by the careers practitioner. In all cases students were directed to their individual reports and embedded resources located within these. As longitudinal datasets become available (from 2020) I will review the responses from multiple student cohorts to ascertain whether some concerns merit curricular time and consideration at the next curricular review.

## Key Points in the Design of Equitable Employability Development

In this final section, and based on the lessons learned during our first year, I highlight the features which might enable similar initiatives at other institutions.

*Redefine employability as it is understood at the institutional level* by shifting the emphasis from graduate-level employment and towards students’ ability to find, create and sustain meaningful work across the career lifespan and in multiple settings. This requires the institution to trust that a focus on development will result in better and more equitable graduate outcomes. Having a team which included educators, researchers, career practitioners and relevant institutional leaders was a particular benefit when making the argument for change. Particular points of leverage include the alignment of employability – as an outcome – with student success and retention; the introduction of performance measures to assess the quality of education outcomes; and shared acknowledgement of the importance of rethinking the ways in which student data are collected and utilised.

Students typically perceive their choice of degree as a career choice with dominant influences including their interest in the field, job availability and security, and the anticipated salary, workload, and social prestige associated with the field (Downey et al., 2011). Here, too, disadvantaged students encounter further challenges, tending to select

'safe' vocational pathways with which they will be able to meet their financial needs (Morrison, 2014). It is therefore pertinent to encourage students to participate in, and recognise the value of, the opportunities available within and alongside their degree. A metacognitive view of employability brings to the fore the intrinsic and extrinsic factors which motivate students to choose their major and leverages these factors to energise student engagement.

***Engage careers and equity practitioners in the curriculum through a partnership approach.*** One of the most difficult challenges in our first year was to enable the engagement of career practitioners in the explicit delivery of EDOs. Communication at the unit level, for example, often defaulted to academic staff such that career practitioners were omitted. This was resolved only by consistently forwarding on all communication; however, the challenge was overcome once career practitioners became known to staff and the benefits of their expertise were realised. Academic staff were often surprised to find that their career-related activities could be supported and perhaps enhanced.

I expected that the workload of career practitioners might increase and this was the case. By focusing on foundation first-year units I had no more than two active units per faculty. Careers colleagues welcomed the opportunity to offer embedded activities derived from students' self-reports rather than spending valuable time trying to negotiate access to students. Although there will be some extra work for career practitioners for the first three years of operation, this is likely to be negated once the demands of previously unengaged final-year students decline.

***Position student data collection as a process through which students generate developmental agency and gain an immediate return on their investment of time.*** Student-derived data and analytics should contribute to both external reporting and internal business intelligence. However, the value of student data is dependent on the reliability of their responses, the integration of institutional datasets, and the institution's capacity to use these data to create change both in the longer term and within a single study period.

From an educational perspective, realistic expectations are created for students through appropriate, sufficient and consistent information. The engagement of learners as contributors to, and consumers of, data is

therefore likely to lead to ‘more complex and sophisticated expectations of university and of their own roles and responsibilities’ (James, 2002, p. 81; see also Hooley et al., 2018), heightening their success and enabling them to make more informed decisions. The employABILITY approach helped students to frame employability development as a strategy for creating and refining the future they might prefer. Students engaged because we told them to! Their feedback, however, is that they went on to use the website and the resources embedded in their reports to meet their ‘just-in-time’ learning needs.

Early data analysis indicated that students engaged genuinely with the self-reflection tool: there were very few invalid responses; similarly, over 99% of students opted to include their anonymised responses in the dataset used for research and curricular renewal. Early analysis also revealed significant differences in students’ confidence across fields of study. This might be expected given the professional focus of disciplines such as engineering and medicine compared with disciplines with less defined outcomes, such as in the creative arts. However, it also relates to the growing precarity of the labour market in multiple fields of study, including business, IT and allied health.

Taken together with other findings there is scope to inform targeted interventions both within the curriculum and more broadly. Alignment of data with institutional datasets will enable the specific needs of disadvantaged student cohorts to be understood and appropriate and timely supports to be offered, albeit at a cohort level. Analysis across multiple institutions will enable the research team to understand student needs, target existing resources, maximise the efficacy of study and career services and inform predictive measures of retention and success.

***Consider multi-institution approaches.*** The employABILITY self-assessment tool and resources are entirely open access, enabling a collaborative approach to the enduring challenge of equitable student and graduate success. By January 2020 the approach had engaged with over 40 institutions and more than 18,000 students had included their responses within the research dataset. The data have the potential to elicit significant insights into students’ confidence, career aspirations and decision making, with these inquiries led by a community of researchers. The research is important not only to employability: students’ attitudes,



subjective norms and behavioural intentions are crucial to their choice of major (Soria & Stebleton, 2013), their engagement and retention (Cantt & Wated, 2011), their assessment of career prospects and potential salary (Malgwi et al., 2005) and their engagement with graduate attributes statements (see Pitman & Broomhall, 2009).

## Concluding Comments

Higher education's focus on student success and graduate employability is ubiquitous. Less discussed is the process of employability development and the extent to which existing initiatives respond to the needs of a diverse student population. Kalfa and Taksa (2015) frame students' development of technical and core capabilities as the acquisition of cultural capital (qualifications and social competence) which increase their chances of inclusion in their desired field: thus, the development of employability can be viewed as a tool for promoting social equity. However, researchers remind us that even when students experience a degree that actively cultivates student success and employability capabilities, graduates' employability is still influenced by a range of capitals (e.g. Tomlinson's human social, cultural, identity and psychological capitals) and by socio-economic factors outside of the institution (Bennett et al., 2017; Gracia, 2009; Tomlinson, 2017). Students' cultural capital, work experience, cultural values and language skills thus influence students' ability to access career-related learning (Mackaway & Winchester-Seeto, 2018), limit the benefits of this learning (Hewitt et al., 2018), and limit students' ability to understand which employability capabilities are important and how they might be so. A level playing field can only be achieved if employability development is embedded within the core curriculum, not as generic skills delivered separately from their studies but as a core component of them. Never has this been more true than in the midst of a global pandemic, given that students who graduate into a depressed labour market might feel the impacts for the entirety of their career (Burgess & Sievertsen, 2020). As Canning wrote in May 2020, 'Widening participation matters too much for COVID-19 to shut it down'.

The initiative described in this chapter received no special funding and relied on its ability to be incorporated within existing first-year curricula. The design-centric approach enabled us to amass student data in a way that was beneficial for students and which helped me to respond to their learning and developmental needs through targeted activities in the same study period. By working in partnership, situating employability as processual and embedding it within the existing curriculum, I was able to ensure that every student had equal access. I did not initially embed the approach across multiple years of study or integrate it fully with the university's retention strategy. However, I began the longer journey of understanding and supporting the needs of all students.

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# 11

## Designing Assessment and Feedback to Improve Student Learning and Student Success

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### Introduction

Assessment is often used to measure students learning, as evidenced by Popham (2009, p. 5), who defines assessment as ‘a wide variety of evidence-eliciting techniques’. This definition of assessment includes formal exams and tests, as well as more formative ways of gauging whether students have understood a subject, like in-class questioning. The current chapter focuses on how assessment and feedback in higher education can be used to improve students’ learning and success.

The assessment literature often contrasts formative and summative assessment. Formative assessment can be labelled assessment *for* learning, whereas summative assessment is assessment *of* learning. The main

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difference between formative and summative assessment lies in their timing and goals. Formative assessment evaluates and monitors students' learning during the learning process to enhance student learning and improve teachers' teaching, whereas summative assessment evaluates learning at the end of a course. Formative and summative assessment do not have distinct assessment types; for example, a quiz could be a formative as well as a summative assessment.

The term formative assessment was popularised by Black and Wiliam (1998) and research has indicated that formative assessment is more beneficial for student learning than summative assessment (Black & Wiliam, 1998; Kluger & DeNisi, 1996). Formative assessment can inform students which parts of knowledge they already possess and which knowledge they have to develop further. For students to fully develop the missing knowledge, however, it is important that they are also presented with opportunities or indications as to how they can develop the missing knowledge.

This chapter first explores a few facets of assessment that apply to formative as well as summative assessments and subsequently focuses on the design of formative assessment and feedback, followed by a discussion of the use of technology and academic integrity. After an overview of the literature, three case studies that show different assessment and feedback designs, and students' beliefs about feedback, are discussed.

## Assessment in the Curriculum

The way students are assessed is an important part of the curriculum. An assessment can be, for example, a multiple-choice quiz, an exam, a written essay, a presentation or an artefact. There is no clear evidence that some types of assessment lead to more student success than others (Day et al., 2018a). However, Biggs (1996) stressed that assessment should be designed to measure student performance in relation to the learning objectives, a connection he defined as constructive alignment. Sambell and Brown (2020) suggest working together with students to design relevant assessments for authentic assessment. Student involvement in assessment is also apparent in Biggs (1996), who states that the best way

to assess higher order learning objectives is to use portfolios where students select their own relevant evidence with regard to learning outcomes. Regardless of the type of assessment, several characteristics of assessment can influence its usefulness for improving student success.

## Assessment Characteristics

Day et al. (2018a) reviewed assessment characteristics and their relation to student grades. They discussed the merits of assessment frequency, mandatory assessments, assessment rewards, feedback and different assessors. The first three are discussed here as assessment characteristics, whereas feedback and assessors get additional attention later in this chapter as individual sections. See Day et al. (2018a) for a full overview of all different characteristics and examples of how these were utilised in different curricula.

### Frequent Assessment

In previous research, university teachers and students both lauded the possibility that assessment can help students keep on track with the subject matter taught in the course (Day et al., 2018b). This effect is most prominent when students are frequently assessed throughout a course. In addition to encouraging students to keep up with their coursework, frequent assessment can also be beneficial for cognitive reasons. Dunlosky et al. (2013) describe the benefits of distributed practice, which refers to spreading study work throughout the semester instead of last-minute cramming. According to Dunlosky et al. (2013), distributed practice is one of the two most effective learning strategies, next to practice testing. Since many of students focus their study efforts on assessments (Cohen-Schotanus, 1999), distributed assessments encourage students to distribute their studying as well. Moreover, increasing the number of assessments may lead to increased time on task, which improves learning outcomes (Admiraal et al., 1999). However, frequent assessment can also have negative effects, such as a high assessment workload (Day et al., 2018b).

When the workload gets too high this may lead students to prioritise assessments over other coursework or lectures (Harland et al., 2015).

With respect to the frequency of assessments it is important to align the number of assessments to the course goals (compare with constructive alignment; Biggs, 1996). Examples of frequent assessment that have shown positive effects on student grades include weekly quizzes (e.g. Fautch, 2015; Kibble et al., 2011) and a series of writing assignments in a course (e.g. M. Gielen & De Wever, 2015; Mulder et al., 2014). Assessments like classroom discussions or questioning and answering via clickers can be part of every class (e.g. Knight & Wood, 2005).

One way of introducing frequent assessment is by designing programmatic assessment (van der Vleuten et al., 2012). Programmatic assessment is a longitudinal assessment design consisting of several low-stakes assessments that inform learning and can be aggregated to high-stakes pass/fail decisions. Programmatic assessment assumes that a student's performance on a single assessment is often context dependent and therefore flawed. Van der Vleuten et al. (2012) argue that only an assessment programme designed following the principles of programmatic assessment promotes learning and allows robust decision making on students' performance.

## Mandatory Assessment

When assessment is used as an incentive for students to keep up with their study work it may be tempting to make all assessments mandatory. However, Biggs (1996, p. 359) quotes a student teacher who felt that designing a curriculum with 'numerous rules [...] for [their students] to follow' where the teacher 'did all the preparations and planning for them, giving them mountains of homework and short tests to make sure they revise', actually led to passive and dependent students. In this respect it is very important to keep the course objectives and constructive alignment in mind, where assessment encourages students to engage with the course materials in a *meaningful* way, for example by eliciting deep learning instead of rote learning.

Results from the literature review show that making assessment activities mandatory does not increase student success significantly (Day et al., 2018a). However, in studies investigating the effects of assessments, mandatory and non-mandatory assessment are usually not compared within a single cohort of a course. Therefore, it is difficult to draw clear conclusions on whether mandatory assessments lead to improved student success.

When assessment is not mandatory some students will usually not complete it, and this self-selection may be detrimental to students' success. Cano (2011) posits that male students opt-in for assessments less often, which may be problematic, since research at Leiden Law School has shown that male students performed worse than their female peers on courses without mandatory in-course assessment (i.e. assessment during the course period as opposed to at the end of the course; Day et al., 2018c). Since there were no gender differences in courses with in-course assessments, it seemed that making these assessments mandatory helped close the achievement gap between male and female students.

## Assessment Rewards

Rewarding students with a percentage of the course grade can be an incentive for them to participate in assessments. Harland et al. (2015) noted that students often prioritise graded work, and even walked out of a non-graded lecture to focus more time on a graded assessment. However, as will be discussed in the following section, rewarding students for assessments may impede their learning. Gibbs and Simpson (2005) found that when students are provided with a grade and feedback at the same time, they often ignore the feedback, a finding that is reiterated by Winstone and Boud (2020).

## Formative Assessment and Feedback

Both summative and formative assessments can be frequent and mandatory, but formative assessment has a different function. As mentioned before, formative assessment is assessment *for* learning, instead of assessment *of* learning.

While developing their theory of formative assessment, Black and Wiliam (2009) state that formative assessment consists of five key strategies, which can be found in Table 11.1. These five strategies can subsequently be the reason a teacher employs a specific formative assessment activity, like classroom questioning.

As evidenced by the third strategy formulated by Black and Wiliam (2009), feedback plays an important role in supporting student learning. However, as mentioned before, the combination of feedback and grades may impede the effect of feedback (Winstone & Boud, 2020). Shute (2008) suggests that providing a grade and feedback simultaneously makes students neglect the feedback. Brookhart (2001, p. 164), on the other hand showed that high achieving students are able to use the grades they receive in summative assessments in a formative way by ‘taking stock’ of where their knowledge and skills currently are and how they need to develop these. Taras (2009) has suggested that formative and summative assessment should not be seen as separate assessment *functions* but as assessment *processes*, arguing that a single assessment can have summative and formative processes, and that formative and summative assessment cannot exist without each other. Therefore, summative assessment should not be dismissed simply because it may not support learning in

**Table 11.1** Key strategies of formative assessment (taken from Black & Wiliam, 2009, p. 8)

Key strategy
1 Clarifying and sharing learning intention and criteria for success
2 Engineering effective classroom discussions and other learning tasks that elicit evidence of student understanding
3 Providing feedback that moves learners forward
4 Activating students as instructional resources for one another
5 Activating students as the owners of their own learning

the way formative assessment does. Winstone and Boud (2020) formulated several strategies to preserve the function of feedback, conceding that completely disentangling assessment and feedback may not always be possible. These strategies focus, for example, on adaptively releasing grades after students have accessed feedback, or on a conscious curriculum design where students will be able to apply the feedback they received, which corresponds with the aforementioned notion that frequent assessment could be beneficial for learning.

When looking at ways in which assessment can support learning, Gibbs and Simpson (2005) identified ten conditions for this process in higher education (see Table 11.2). Condition 1 reiterates that assessment can help students to spend time on the task, while conditions 2 and 3 invoke constructive alignment (Biggs, 1996). Conditions 4–10 are all related to feedback, which is explored further in the following paragraphs.

Providing students with proper feedback may be one of the most important ways to improve their learning and subsequent success. Black

**Table 11.2** Conditions under which assessment supports learning (Gibbs & Simpson, 2005)

Condition
1 Sufficient assessed tasks are provided for students to capture sufficient study time
2 Tasks are engaged with by students, orienting them to allocate appropriate amounts of time and effort to the most important aspects of the course
3 Tackling the assessed task engages students in productive learning activity of an appropriate kind
4 Sufficient feedback is provided, both often enough and in enough detail
5 The feedback focuses on students' performance, on their learning and on actions under the students' control, rather than on the students themselves and on their characteristics
6 The feedback is timely in that it is received by students while it still matters to them and in time for them to pay attention to further learning or receive further assistance
7 Feedback is appropriate to the purpose of the assignment and to its criteria for success
8 Feedback is appropriate, in relation to students' understanding of what they are supposed to be doing
9 Feedback is received and attended to
10 Feedback is acted upon by the student

and Wiliam (2009) introduced feedback as one of their key strategies of formative assessment and seven out of ten of Gibbs and Simpsons' (2005) conditions for assessment that supports learning focus on feedback. Feedback can be defined as the '*information* communicated to the learner that is intended to modify his or her thinking or behaviour for the purpose of improving learning' (Shute, 2008, p. 154, emphasis added). However, in the last decade, conceptions of feedback as a '*process* whereby learners obtain information about their work [...] in order to generate improved work' (Boud & Molloy, 2013a, p. 6, emphasis added) have become more prevalent (Dawson et al., 2019).

In designing feedback models, Boud and Molloy (2013b) categorise *feedback as information* within the first model, which they refer to as 'Feedback Mark 1'. In this model, feedback is teacher centred, and focused on providing students with information they can use to improve themselves. However, Boud and Molloy (2013b) argue that within this model, students are not active participants in their learning, but passive recipients of information. They propose a new model, referred to as the 'Feedback Mark 2' model, to more closely fit the *feedback as a process* definition.

Within the Mark 1 model, where students are passive receivers of information, researchers like Hattie and Timperley (2007) and Shute (2008) have synthesised studies on the content and timing of the provided feedback information. Hattie and Timperley (2007) suggested a model for feedback that consists of answering three questions. They suggest that all students need to know where they are going (course objectives; feed up), how they are doing with regard to the objectives (feedback) and what they should do to reach the objectives (feedforward). These three questions also play a role in Black and Wiliam's (2009) key strategies for formative assessment. For example, the key strategy 'clarifying learning intentions and criteria for success' (p. 8) is clearly related to feed up, whereas 'providing feedback that moves learners forward' (p. 8) is feedforward. The feedback model by Hattie and Timperley (2007) also suggests that feedback can be provided at four different levels, that is, the task level, the process level, the self-regulation level, and the self level.

Shute (2008) provided guidelines for formative feedback design based on the literature. Some suggestions are that feedback should be focused

on the level of the task instead of that of the learner, including using praise sparingly, because this can focus students' attention on the self instead of on the task and this may subsequently hinder learning. With regard to the presentation of feedback, Shute (2008) argues that feedback should be clear, but elaborated, and in manageable units. Additionally, she posits that not all students need the same amount and complexity of feedback and that when feedback is too complex it could overwhelm students, making them less likely to learn from the feedback. High achieving students, for example, may only need corrective feedback, whereas low achieving students benefit more from elaborated feedback.

In contrast to the focus on students receiving feedback information in the Feedback Mark 1 model, the Feedback Mark 2 model of active student participation has three main elements (Boud & Molloy, 2013b): the learners, the curriculum and the learning milieu. The first element suggests that learners need to be active participants in their own learning; seeking for feedback to utilise, instead of waiting for a teacher to provide them with information. Nicol and Macfarlane-Dick (2006) proposed seven principles of good feedback on the assumption that all students are able to self-regulate their learning (see Table 11.3).

Nicol (2009) proposed that teachers in higher education should support students in developing their abilities to seek, interpret and utilise feedback and not focus on providing perfect feedback. Yet, recent research by Dawson et al. (2019) reported that students see the content of feedback comments as the most important factor for effective feedback,

**Table 11.3** Seven principles for good feedback practice (Nicol & Macfarlane-Dick, 2006, p. 205)

Good feedback:
1 Helps clarify what good performance is (e.g. goals, criteria, expected standards)
2 Facilitates the development of self-assessment (reflection) in learning
3 Delivers high quality information to students about their learning
4 Encourages teacher and peer dialogue around learning
5 Encourages positive motivational beliefs and self-esteem
6 Provides opportunities to close the gap between current and desired performance
7 Provides information to teachers that can be used to help shape teaching



**Table 11.4** Eight features of the curriculum for Mark 2 (Boud & Molloy, 2013b, p. 707)

	Feature
1	Learners orientated to the purposes of feedback
2	Learners participate in activities promoting self-regulation
3	Learner disposition for seeking feedback is developed
4	Opportunities provided for production of work
5	Calibration mechanisms
6	Incremental challenge of tasks
7	Nested tasks to allow for feedforward
8	Learner as 'seeker and provider'

although the quality of the content that was cited by students most often was its usability.

The second element of the Feedback Mark 2 model of active student participation focuses on the curriculum, where feedback should be a central means of engaging students (Boud & Molloy, 2013b). Boud and Molloy propose eight features of the curriculum that are necessary to facilitate active participation of students in the feedback process, which can be found in Table 11.4.

The final element of Mark 2 is the learning milieu, or the translation of the designed curriculum to everyday learning. According to Boud and Molloy (2013b, p. 708), 'feedback Mark 2 is dependent on a learning environment that fosters continual improvement and creates opportunities for knowledge seeking and application by students.' In this milieu, there should be extensive opportunities for all forms of dialogue, and learners should trust that the teacher and their peers provide relevant and qualitative comments, since students will be apprehensive to act on the basis of irrelevant comments.

## Peer and Self-Assessment

Teachers are usually the assessor of student learning, but students can also assess each other or themselves. Black and Wiliam (2009) indicated the importance of peer and self-assessment, by relating their final two key strategies to activating students as educational resource for each other

(peer assessment) and owners of their own learning (self-assessment). Peer and self-assessment also fit within curriculum features proposed by Boud and Molloy (2013b), where ‘calibration mechanisms’ (p. 707) include having students judge their own work (self-assessment) and ‘learner as seeker and provider’ (p. 707) suggests that students should practice giving as well as receiving feedback (peer assessment).

Peer assessment and peer feedback are often used interchangeably; however, peer assessment does not always include the opportunity for students to provide feedback to each other. For example, peers scoring each other’s work would be regarded as peer assessment, but including comments for improvement is peer feedback. Peer feedback may be especially helpful because students often have a similar level of understanding, meaning they provide feedback at the level it is needed, in accordance with Shute’s (2008) suggestion that feedback should be provided on the learner’s level. According to Topping (1998), peer feedback could be beneficial because a more competent peer suggests points of improvement, or because the feedback provider has different opinions.

Several researchers have studied the merits of peer assessment compared to teacher assessment. H. Li et al. (2020) found that students who participate in peer assessment, whether this was grades only, grades and comments, or comments only, show greater improvement than students who participate in teacher assessment only, or in no assessment at all. However, Snowball and Mostert (2013) found that students are often mild graders to their peers.

When looking specifically at peer feedback, Patri (2002) found that students can provide feedback on a similar level as teachers, if they are provided with clear feedback criteria. Research into students’ acceptance of peer feedback has shown contrasting results. Welsh (2012), for example, found that students are willing to accept peer feedback and value it as much as teacher feedback. In contrast, McConlogue (2015) suggests that not all students will fully engage with peer feedback because, for example, some peers do not put a lot of effort into their feedback, or because students do not trust the quality of their peers as feedback providers. Admiraal (2014) also found that students prefer teacher feedback. Some of students’ scepticism towards peer feedback could be overcome by engaging students in extensive peer feedback training (Huisman et al.,

2020), or by providing students with opportunities to strengthen trust in their peers (Boud & Molloy, 2013b).

Several authors have argued that the process of *providing* peer feedback could be more beneficial for students than the process of receiving feedback. Lundstrom and Baker (2009), for example, found that feedback providers showed greater improvement than feedback receivers. Topping (1998) argues that providing peer feedback makes students spend additional time on the task and helps them reflect on the assessment criteria, which they subsequently can apply to their own work. Boud and Molloy (2013b) note that students being providers of feedback, and not just receivers, is an important feature of good curriculum design for Feedback Mark 2.

Van Zundert et al. (2010) suggest that for students to be able to provide high quality peer feedback, they should get peer feedback training. Peer feedback training can also improve students' attitudes towards peer feedback, which in turn may influence their behaviour during the peer feedback process (Huisman et al., 2020).

Topping (1998) synthesised a typology of peer feedback, consisting of 17 variables that can vary in a peer feedback assignment, which was extended to 20 variables by S. Gielen et al. in 2011. Van den Berg et al. (2006a) studied the outcomes of varying several of these variables and found that having sufficient time between peer and final teacher assessment, providing reciprocal peer feedback, and feedback groups of three to four students were most beneficial for effective peer feedback. Results indicated that students revising their assignments based on received peer feedback did not get higher grades than students who did not receive peer feedback in this study. However, students did show significant improvement from draft to final version (van den Berg et al., 2006a).

In addition to peer assessment, students can also assess themselves, often using rubrics or lists of assessment criteria. Self-assessment may be beneficial for similar reasons as providing peer assessment, like reflecting on assessment criteria and increased time on task. Boud and Molloy (2013b) also noted the importance of providing students with the opportunity to check their work before it is graded. However, research has indicated that there are often discrepancies between outcomes of teacher and self-assessment. Some examples of these are that more advanced students

are more accurate raters than their less advanced peers (Falchikov & Boud, 1989), and that high achieving students underrate their performance, whereas low achieving students overrate themselves (De Grez et al., 2012; Topping, 1998). Furthermore, Torres-Guijarro and Bengoechea (2017) found that female engineering students often under-rate themselves.

## Assessment Literacy and Feedback Literacy

Students also have an important part in achieving student success through assessment. In order to be effective, students need to be active participants in the feedback process (Boud & Molloy, 2013b) and engage with the assessment and its feedback in a meaningful way (compare conditions 9 and 10 by Gibbs & Simpson, 2005). To be able to truly benefit from assessment, students should be assessment and feedback literate.

Assessment literacy is defined by Smith et al. (2013, p. 46) as ‘students’ understanding of the rules surrounding assessment in their course context, their use of assessment tasks to monitor or further their learning, and their ability to work with the guidelines on standards in their context to produce work of a predictable standard’. It is important for students to develop assessment literacy because students who show assessment literacy are able to judge and monitor their performance and are able to take responsibility for their own learning. In addition to students’ assessment literacy, Popham (2009) also focuses on the importance of assessment literacy for (school) teachers, stating that teachers who are assessment literate make better decisions relating to assessment. However, a full discussion of assessment and feedback literacy for teachers is beyond the scope of this chapter.

In addition to the concept of assessment literacy, Carless and Boud (2018, p. 1316) define feedback literacy as ‘the understandings, capacities and dispositions needed to make sense of information and use it to enhance work or learning strategies’, which is an extension of Sutton’s (2012) concept of feedback literacy. Carless and Boud (2018) propose a framework for feedback literacy that consists of four features. First, students should appreciate the feedback process by seeing the value of

feedback and their active role in the process. Students should not rely on the teacher to reveal the correct answers, a process that Carless and Boud (2018, p. 1317) refer to as 'feedback as telling'. Second, students should be able to make judgements about the quality of their work, or the work of their peers. Third, students should manage their emotions and attitudes surrounding feedback, since they often feel defensive in response to feedback, especially when it is critical. The fourth and final aspect of the framework is taking action, which follows after students engage with the first three processes. Again, Gibbs and Simpson (2005) already argued that assessment only supports learning when students act upon feedback. Molloy et al. (2020) applied the four key features of the conceptual feedback literacy model proposed by Carless and Boud (2018) to empirical student data, to further explore the concept of feedback literacy and to get a student perspective on feedback literacy. Their results indicate that students incorporate the features proposed by Carless and Boud (2018) into their feedback practice. Since learners' perspectives on feedback are very important if they need to be an active participant in the feedback process, Molloy et al. (2020) developed a learner-centred framework consisting of seven groups of feedback literacy behaviours. These groups are, 'commits to feedback as improvement', 'appreciates feedback as an active process', 'elicits information to improve learning', 'processes feedback information', 'acknowledges and works with emotions', 'acknowledges feedback as a reciprocal process' and 'enacts outcomes of processing of feedback information' (Molloy et al., 2020, p. 529). The expanded view on student feedback literacy following from these results can be used in designing learning environments that foster feedback literacy.

## Improving Assessment and Feedback Literacy

Since assessment and feedback literacy are prerequisites for a successful assessment and feedback practice, teachers should try to improve both types of literacy from the start of students' first year. In the same way that assessment and feedback are closely related, assessment and feedback literacy are strengthened using similar methods, where developing students' skills in judgement seems to be the most important.

Smith et al. (2013) studied the effects of a 45-minute assessment literacy intervention where students graded two exemplar assignments, decided which was the better assignment, and compared their judgements to the assessment rubric. After this intervention, students' assessment literacy (understanding and judgement) and use of assessment for learning increased. Subsequently Smith et al. (2013) found that the increase in ability to judge the value of their own (or others') work was related to increased learning outcomes.

In a similar vein, Carless and Boud (2018) suggest that the best way to improve feedback literacy is by having students analyse exemplars and by providing and receiving peer feedback. When students analyse exemplar assessments, they are familiarised with teachers' expectations with regard to assessment quality. Furthermore, seeing high quality work and comparing the quality of different exemplar assignments helps students develop their skills in academic judging. Providing as well as receiving peer feedback can help to develop feedback literacy by putting the responsibility for feedback in students' hands, and again by developing their academic judgement. Malecka et al. (2020) formulated four principles for incorporating feedback literacy in the curriculum: 'feedback is consciously designed', and not a last-minute decision in course development; 'students get ample opportunity to practice eliciting, processing and applying feedback'; 'feedback literacy is incorporated in a cumulative and progressive fashion', resulting in further development of assessment literacy over the course of students' educational career; and 'feedback is traceable', which makes it easier for teachers to build on previous feedback, or see how students have processed the feedback. Malecka et al. (2020) provide examples of practices for the development of feedback literacy, like the use of e-portfolios which can enable students to 'revisit feedback, set their own developmental goals and document progress' (p. 11).

Carless and Boud (2018) suggest that feedback literacy can only develop when teachers design their curriculum for active student participation, because students need to actively work on improving their feedback literacy (compare the importance of curriculum and milieu in Boud & Molloy, 2013b). Furthermore, teachers should explain the importance of the learning activities related to the development of feedback literacy

and discuss any discrepancies between teacher and student views about feedback. Teachers could also explain to students how academics are exposed to peer feedback and model their responses.

## Technology

Assessment and feedback can be enhanced by technology. Using technology like online platforms for feedback and assessment increases the possibility for asynchronous feedback providing, which makes them especially suited for use in online and distance learning where students may not be available at the same time as their peers. Brown and Sambell (2020) explored alternatives for face-to-face assessment in the context of the COVID-19 pandemic and suggest several technological options, like online peer assessment or having students prepare a podcast instead of a presentation. Their further work on how assessment should be designed post-pandemic (Sambell & Brown, 2020) also heavily incorporates technological measures.

However, before the pandemic, technology was already playing an important role in assessment. Over half of the studies discussed in the review by Day et al. (2018a) used computers or an online environment for assessment. One example of such a study is the one by Nicol (2009) where students' learning was improved by giving them ample assessment opportunities through an online environment, and where teachers could monitor students' learning through the platform, to adapt their teaching where necessary.

Shute (2008) suggests that feedback which is provided on paper or online is attended to more than oral feedback and H. Li et al. (2020) found that computer-mediated peer feedback provided increased learning gains when compared to pen-and-paper-based peer feedback. In recent research, peer feedback is often provided through digital platforms like Turnitin (e.g. Huisman et al., 2017; Huisman et al., 2018; Nicol et al., 2014). Carless and Boud (2018) praised the speed of delivery and portability of digital peer feedback.

Digital feedback platforms have several characteristics that can aid the feedback process. These platforms (e.g. Turnitin or Pitch2Peer) can often

automatically match peers into feedback couples. Furthermore, online peer feedback can easily remain anonymous, which may increase the effect of peer feedback (L. Li, 2017).

Van der Pol, Admiraal and Simons (2006) found that annotating online discussion to specific text elements led to improved outcomes compared to standard discussions. This annotating of comments and feedback to specific information is also facilitated by digital peer feedback platforms, especially when feedback is provided on videos or other non-written assignments.

## Academic Integrity

When discussing assessment, it is important to focus on facets of academic integrity and cheating as well. Research shows a wide variety in the prevalence of cheating behaviours by students. Dawson (2021) cites studies with prevalences ranging from 1% to 20% and Australia's Tertiary Education Quality and Standards Agency (TEQSA, 2017) cites up to 72%, dependent on the definition of cheating. The focus on cheating and academic integrity is especially important in the current context, where assessments are technology-moderated more often, and students are being assessed remotely during the COVID-19 pandemic. Ryan et al. (2020), for example, discovered that academic integrity guidelines are often focused on plagiarism and collusion, but not on cheating during (remote) exams. Subsequently, students' ideas about academic integrity did not transfer to the new context of remote examination.

Dawson (2021), in his latest book, has focused on how students use technology to cheat, so-called e-cheating. Dawson argues that technology has introduced new ways of cheating, like paraphrasing tools or having a third party log in to an online examination, but it has also further facilitated contract cheating (e.g. hiring someone to write an essay), due to the use of online platforms to connect cheaters and writers or the added anonymity by encryption on the internet.

An important way to prevent cheating may lie in assessment design. The UK's Quality Assurance Agency for Higher Education (QAA, 2017) suggests, for example, to use multiple different assessment methods, or to



introduce authentic assessments. Authentic assessments ‘better reflect the complex challenges [students] will face in the real world’ (Ellis et al., 2020, p. 455) and thus serve an important pedagogical function. According to Ellis et al. (2020) researchers assume that authentic assessment makes contract cheating less likely, more difficult, or easier to detect. Sambell and Brown (2020) state that the authenticity of an assessment not only relates to employability and the development of professional skills, but they explicitly include academic integrity in their definition of authentic assessment. Furthermore, their suggestion to involve students in the design of meaningful and authentic assessments may also work as a deterrent for cheating. However, Ellis et al. (2020) found that students still engaged in contract cheating when authentic assessments were used.

In addition to assessment design, TEQSA (2017) proposed 21 good practices to promote, address breaches of, and mitigate risks to, academic integrity. Additionally, the QAA (2020) has published a guidance on assessment integrity during digital education, which also includes best practices, and reflective questions educators can ask themselves when moving their assessment online.

## Cases

This section describes three cases related to feedback and assessment. Cases one and three are examples of how assessment can be used to improve student learning and student success, whereas case two focuses on the student experience of peer feedback. The first case focuses on the use of peer feedback, since both assessment literacy and feedback literacy can be improved by having students look at exemplar assessments to develop their capabilities of judging the quality of work. The second case investigates students’ beliefs with regard to peer feedback. The third case focuses on how assessment can be part of a curricular redesign.

## Case 1: Peer Feedback on Draft Presentations

At Leiden University the use of peer feedback on writing assignments has been studied in several educational programmes, like the bachelor programmes Biopharmaceutical Sciences or Child and Education studies (Huisman et al., 2017; Huisman, et al., 2018). Topping (1998) described that the majority of peer feedback research has focused on writing assignments, but that peer feedback is also suitable for other types of assessment, such as assignments for assessing presentations or professional skills. We have previously studied the use of peer feedback in presentation assignments (Day et al., 2021) and will discuss this further in the following section.

In the design of the peer feedback assignment, Black and Wiliam's (2009) key strategies 1 (criteria for success) and 4 (peers as instructional resource) were utilised. Furthermore, several of the conditions for learning from assessment as addressed by Gibbs and Simpson (2005), like providing feedback when students can still process it, and curriculum features proposed by Boud and Molloy (2013b), like nested tasks to allow for feedforward, were incorporated as well.

## Methods

This case focuses on a Chemistry course part of the bachelor degree Liberal Arts and Sciences at Leiden University College (an international honours college) and an Academic Skills and Workplace Orientation course part of the bachelor Child and Education Studies at the Faculty of Social and Behavioural Sciences.

Six students were enrolled in the Chemistry course, an eight-week course consisting of 14 biweekly lectures, graded homework assignments, an essay and presentation, and a final exam. For the presentation students were required to upload a draft and provide peer feedback to two of their fellow students.

Students were required to give a 5–10 minute presentation about a subtopic of chemistry of their personal interest. The researcher came to a class meeting to introduce Pitch2Peer, the digital platform where

students needed to upload their draft presentation videos, and the rubric they would use for providing feedback. Since students already had experience with presenting and providing peer feedback through other courses in their program, the instruction given in the introductory meeting did not include strategies for peer assessment.

Fifty-six students (about 60% of those enrolled) in the Child and Education Studies course participated in the study. This year-long course focused on skill development and exploration of the work field of child and education studies and consisted of five work group meetings and several colloquia. All students were required to give a 7–8 minute presentation about the different Child and Education Studies Masters' programmes as offered by Leiden University. In this presentation students focused on the courses in the programme, entrance requirements, and career opportunities. Students usually presented in duos, but depending on the size of their specific work group, presenters could also be solo or in a trio. In preparation for the presentation, the researcher gave a lecture on presentation and feedback skills, and introduced the Pitch2Peer platform.

In both courses, the presentation rubric focused on four general categories: content, manner of speaking, presence, and use of audio-visual equipment. The latter three categories have the same subcategories in both courses, but for the Child and Education Studies course, two subcategories of the content category were replaced with one subcategory focusing on whether students met all required components of the presentation. The full rubric including all subcategories for each main category can be found in Table 11.5.

The timelines for the two courses were slightly different. In the Chemistry course students needed to upload their presentation into Pitch2Peer, a digital peer feedback environment, one week before their final class presentation. Peers had three days to rate two presentations on a scale of one to five for each category of the presentation rubric, annotate any specific comments they had to specific moments in the video, and write a general feedback comment where they could further expand on the reasoning for their rating. Students could subsequently use the feedback to improve their final presentation. Final presentations were held in class and videotaped by the researcher. Grades for the presentation were

Table 11.5 Peer feedback rubric

Content	Manner of speaking	Presence	Use of audio-visual equipment
1 Language use	Control of text	Position	Added value slides
2 Prior knowledge of audience	Volume and ease of listening	Stability	Planning slides
3 Depth of presentation <sup>a</sup>	Tempo and use of pauses	Hand gestures	Operation of slides
4 Relevance and context <sup>a</sup>	Time speaking	Eye contact	Presence at projection
5 Composition and structure	Activation of audience and persuasiveness	Facial expression	Legibility and illustrations
6	Tone of voice		Design
7			Functionality illustrations, graphs, tables

<sup>a</sup>These two categories were replaced with category 'required components' in Child and Education Studies

awarded by the teacher, without input from the researcher, but were not used in this study. In the Child and Education studies course, students submitted their trial presentations two weeks before the final class presentation, and peers had a full week to provide peer feedback. Just like the chemistry students, they were required to rate the presentation, annotate a specific moment, and write a general comment. Each presenting duo provided feedback to one presentation. Presentations were mandatory but not graded.

To prepare for analysis the researcher rated the draft and final presentation videos using the presentation rubric, and subsequently the scores on the draft and final presentations were compared to investigate whether students' presentation skills improved from the draft to the final presentation. Furthermore, received feedback comments were coded using a matrix of feedback functions and aspects used in previous research (e.g. van den Berg et al., 2006b; Huisman et al., 2017, 2018). Feedback functions are analysis, evaluation, revisions and elaborations on the latter two, and feedback aspects are the four main rubric categories: content, manner of speaking, presence and audio-visual equipment.

## Results

Students in both programmes received between 5 and 64 feedback comments. Generally, students mainly provided comments coded as evaluation, giving explicit and implicit quality statements, and less than 30% of feedback was focused on suggested revisions.

### *Chemistry Students*

Comparing students' mean scores across all 23 rubric subcategories for the draft and final presentation using a paired samples t-test indicates that students' presentation skills improved,  $t(5) = -4.33$ ,  $p = 0.008$ . On the draft presentation, students' mean score was 3.04 out of 5, which improved to 4.00 on the final presentation.

One student did not provide peer feedback, resulting in two students having only one peer feedback provider, whereas all other students had two feedback providers. Investigating how received feedback comments were related to improvement in the presentation revealed a negative connection,  $r = -0.82$ ,  $p = 0.047$ . This negative connection can be explained by the fact that the two students who only had one feedback provider showed the greatest improvement. These students both performed worse than the others on the draft presentation and therefore had the most room for improvement.

### *Child and Education Studies Students*

A comparison of the mean scores for the draft and final presentation paints a similar picture as for the chemistry students,  $t(49) = -7.50$ ,  $p < 0.001$ , although the child and education studies show a smaller increase in score from draft to final presentation, going from 3.73 out of 5 to 4.12. The majority of students (62.5%) received feedback from a single peer, whereas 37.5% of students had two peer feedback providers. Analysis of the relation between received feedback and improvement between the draft and final presentation showed no correlation,  $r = -0.076$ ,  $p = 0.622$ .

## Case 2: Students' Beliefs About Peer Feedback

Some of the literature discussed in this chapter indicates that peer feedback can be beneficial for student learning, but that students may be not as receptive to peer feedback as to teacher feedback (Admiraal, 2014; McConlogue, 2015). Huisman et al. (2020) hypothesised that students' beliefs about peer feedback can influence their subsequent feedback behaviours, and they developed the Beliefs about Peer Feedback Questionnaire (BPFQ) to measure these beliefs. The BPFQ consists of eleven questions divided in four scales. The first scale is the valuation of peer feedback as an instructional method (VIM) and has four questions, the second scale has three questions focusing on the valuation of peer feedback as an important skill (VPS), the third and fourth scale focus on confidence in the quality of received peer feedback (CR) and confidence in own peer feedback quality (CO), with two questions in each scale. All questions are answered on a five-point Likert scale.

### Methods

The current case showcases the peer feedback beliefs of students in the master Child and Education Studies: Learning Problems and Impairments (N = 10) and students in the second year of the Cultural Anthropology bachelor programme (N = 21). All students participated in a peer feedback assignment focusing on a video (a knowledge clip for Child and Education Studies, a presentation for Anthropology). After they received peer feedback, they answered a prototype of the BPFQ. Due to a misprint in the questionnaire, Anthropology students only had one question in the CR scale.

### Results

For an overview of all results see Table 11.6. Results indicate that students in both programmes in general have positive beliefs with regard to peer feedback, with the students in the Bachelor of Anthropology being more

**Table 11.6** Means and standard deviations on the BPFQ

	M Child Ed Studies	SD Child Ed Studies	M Anthropology	SD Anthropology
VIM	3.55	0.78	4.37	0.35
VPS	4.47	0.53	4.48	0.44
CR	3.40	0.74	4.15	0.38
CO	3.60	0.81	4.08	0.58

positive than the students in the Master Child and Education studies. This difference is significant for the scales VIM,  $t(10.76) = -3.17$ ,  $p = 0.009$ , and CR,  $t(12.57) = -2.95$ ,  $p = 0.012$ . According to Huisman et al. (2020) the VIM and CR scales may be conceptually related, which can explain the fact that Master Child and Education studies students score significantly lower on both scales. However, these students still display generally positive beliefs, indicated by their scores of higher than three out of five on all four scales.

### Case 3: Assessment in the First-Year Curriculum of an Undergraduate Law School

The undergraduate law program at Leiden law school enrolls about a thousand first-year students each year. The majority of these students major in law, but about 10% major in criminology. In the first year there is substantial overlap in the course load of the two majors. In an attempt to increase the percentage of students who graduate from the three-year program in a maximum of four years, the educational leadership of the law school initiated curricular reform. Previous research (e.g. Boud & Molloy, 2013b; Malecka et al., 2020) stated the importance of deliberate curriculum design for assessment and feedback. Starting in the 2013–2014 academic year, a revised curriculum with added focus on in-course assessment was introduced for all new first-year undergraduate law and criminology students. On top of the addition of in-course assessments, this curricular reform also included added contact hours in the form of tutorial meetings. Furthermore, a course that was regarded as being tough was moved to the start of the curriculum, to function as an early sorting mechanism. With regard to assessment, full semester courses had to have

a mandatory partial exam. Half-semester courses could choose to include additional assessments in their course and teachers were free to design their own assessments.

About half of the courses in the curriculum had in-course assessments. For several of the criminology courses the use of in-course assessment was more common and already standard practice, but for the law program the assessment was usually new. Teachers often opted for assessments that would keep students on track with their study work (compare conditions 1 & 2; Gibbs & Simpson, 2005), and that could be used to measure course goals that are not easily assessed with a multiple choice final exam (compare constructive alignment; Biggs, 1996). These assessments often took the shape of mandatory preparation assignments for the weekly tutorial meetings, where students would then receive correct answers and general feedback. See Day et al. (2018b) for a full overview of all different types of assessment that were employed in the law program.

## Results

As part of the Day et al. (2018b) study, teachers were asked if the new assessment system improved students' results. The majority of teachers mentioned feeling that students were better prepared and more engaged in class. Furthermore, some courses had improved passing percentages, but teachers were hesitant to connect these to the introduction of assessment, because of the other facets of the curricular change. This also made cohort comparisons impossible, but when first-year students' outcomes in courses with and without in-course assessment were compared in the 2014–2015 academic year, results indicated that students were not performing better in courses that used in-course assessment than in courses that only had a final assessment,  $t(88) = -0.71$ ,  $p = 0.48$ . The difference in performance on courses with and without in-course assessment and the possible role of assessment type and student characteristics in this difference is further explored in Day et al. (2018c).



## Conclusion

This chapter has discussed how assessment and feedback can be utilised to improve student success. Several characteristics of assessment can make it a potent driver of student learning. Assessing students frequently, for example, encourages them to spend more time studying, and provides students with the opportunity to utilise feedback (Boud & Molloy, 2013b). Furthermore, assessment can promote learning through formative assessment, which is designed with the explicit goal of supporting learning, and the use of feedback.

Several authors (i.e. Black & Wiliam, 2009; Gibbs & Simpson, 2005) have discussed properties of assessment that improve student learning, where the focus is on making assessment criteria explicit, eliciting time-on-task and providing feedback. With regard to feedback Hattie and Timperley (2007) stress the importance of feedforward, or telling students what they need to do to reach the course criteria, and Boud and Molloy (2013b) focus on the role of the student as an active seeker of feedback.

An important example of using assessment to improve student success is having students provide peer feedback, as discussed in the first case. Another benefit of peer feedback assessments is that the process of looking at each other's presentations and applying the scoring rubric to the work of their peers helps improve students' assessment and feedback literacies (Smith et al., 2013; Carless & Boud, 2018).

Providing peer feedback is beneficial because the peer feedback provider reflects on the assessment criteria, and receiving good peer feedback, or maybe good 'peer feedforward' is beneficial because it can help students see where they need to go in order to improve their work. For successful peer feedback it is important that students receive peer feedback training (van Zundert et al., 2010). Additionally, the process of providing peer feedback may develop students' feedback literacy (Carless & Boud, 2018), and when peer feedback training consists of having students judge exemplar assignments the process can also boost assessment literacy (Smith et al., 2013).

The cases show examples of assessment and feedback in higher education. Case 3 provides insight in how assessment should be an integral part of curricular design, which corresponds with the concept of constructive alignment (Biggs, 1996). The first and second case are more specifically focused on students' use of, and beliefs about, peer feedback.

The results of the first case should be interpreted cautiously, because of the small sample size in the Chemistry course. Yet, this case shows the potential for using a peer feedback assignment for improving student performance. In the data from Child and Education Studies students discussed in case 1, no connection between received feedback comments and improvement was found. These results warrant further investigation of the relation between peer feedback and students' improvement on presentation skills. Results from the second case show that students have generally positive beliefs with regard to peer feedback, which corresponds with the results of Huisman et al. (2020).

To conclude, assessment and feedback are highly intertwined, and can both be potent drivers of student learning and student success if they are employed thoughtfully.

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# 12

## Re-designing Curriculum to Enhance First-Year Student Success: A Case Study

Trish McCluskey, Gayani Samarawickrema,  
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### Introduction and Overview

Political and economic shifts and policy have generated a gradual evolution and expansion of the higher education sector and resulted in increased participation and greater diversity in social, cultural and educational backgrounds of higher education students. In Australia, increased participation was also driven by the Dawkins and Bradley reforms that focused on a more equitable and inclusive higher education system (Brett & Harvey, 2017). This overall increase in participation numbers resulted in a higher proportion of first-in-family, low socio-economic status, non-English speaking background, Indigenous, migrant, refugee and other equity group students in Australian higher education. This diverse student population has often experienced considerable challenges in study and elsewhere (Oliver et al., 2012) and maximising retention has been a concern for many universities in recent times (van der Meer et al., 2018;

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Willans & Seary, 2018), causing institutions to make significant investments and implement a range of strategies to improve retention. While non-completion has financial implications for students, attrition has both financial and reputational consequences for institutions (Crosling et al., 2009). Retention is vital because, in Australia, it is translated into institutional performance indicators and used to determine funding allocations from the Commonwealth Government's Learning and Teaching Performance Fund. Student attrition is also identified by Australia's Tertiary Education Quality and Standards Agency (TEQSA) as 'a major risk factor for higher education' (Tertiary Education Quality and Standards Agency, 2017, p. 7) and has a primacy of focus in higher education practice, research and policy.

Othman (2016) reviews major studies and theoretical models in student retention, identifying current themes, patterns and strategies – useful for those considering impact and solutions to attrition. More recently, the focus of retention work has been on the first year at university (Larsen et al., 2019; van der Meer et al., 2018; Yorke & Longden, 2008) building on national studies related to whole-of-institution transformation of the first year (Kift, 2009). This is coupled with the need for a greater focus on supporting students to complete their studies and improve their employment prospects, strengthen links to industry and also return value for the student and the public investment in universities (Higher Education Standards Panel, 2017).

## Victoria University and Its Institutional Context

At Victoria University (VU), Australia, mass participation in higher education has resulted in more culturally and linguistically diverse students coming from economically and educationally disadvantaged backgrounds (Funston et al., 2014) making retention an urgent institutional imperative. Some institutions attract high numbers of non-traditional students due to their overall policies, curricular offerings and flexible modes (Schuetze & Slowey, 2002). VU is one such university. It is located in the

west of Melbourne, which is the catchment area for 56% of all of its current domestic students. This western region is also home to a large immigrant community and therefore VU has also been identified as having the highest proportion of non-English speaking background students and a high proportion of students of low socio-economic status, both vulnerable groups. In addition, as a dual-sector university offering both vocational education and higher education, including internal pathways to higher education programmes, an admissions approach that offers a range of entry options and special admission programmes, result in VU attracting a greater diversity of non-traditional higher education students.

Over recent years, VU's student retention statistics trended poorly against sector and national averages (Australian Government Department of Education, 2017). Noteworthy and of concern in this report was VU's 21.41% attrition rate in contrast to the national attrition rate of 14.32%. These trends were both an economic and reputational risk to VU despite the wide-ranging evidence-based strategies applied to improve retention and success (Funston et al., 2014). Specific effort was made by replacing orientation programmes with support programmes designed for students with skills deficits, with more holistic, top-down strategies that took student diversity into account (Gil, 2014), as well as targeted interventions with identified students. Moondani Balluk, VU's Indigenous Studies Unit, also provided transition and co-curricular support to Indigenous Australian students. Despite these institutional efforts to improve retention, the outcomes were modest at best. Recognising that 'institutions are ultimately responsible for identifying the practices that will work best for them and their particular student demographic and community' (Higher Education Standards Panel, 2017, p. 21), VU refocused its retention strategy to improve success, build engagement and foster belonging through a redesigned and active curriculum, taking a whole-of-institution approach to change.

VU's whole-of-institution curriculum strategy was consolidated in 2018 as the VU Block model. The Block model sits within the larger institutional strategy *The VU Way* (Victoria University, 2019), a multi-dimensional approach that intersects and interconnects the Block, the VU First Year Model (FYM), the Beyond First Year (BFY) programme, including postgraduate studies, the VU Polytechnic as well as the

university's research institutes. This holistic, integrated strategy is focused on opportunity and success for all students; purposefully directed at all year levels, thereby ensuring that it is genuinely inclusive of all students.

VU enacts this whole-of-institution strategy for retention by boldly exploiting the power of the curriculum enabled by systematic change management, to create learning experiences that are rich, engaging, stimulating and meaningful to all students. This highly student-centred and purposefully designed curriculum builds engagement, fosters belonging and improves success to deliberately encourage retention and successful outcomes not only in the first year but also into later years. Key elements of this curriculum and structure are described next, followed by results from the first two years of the new strategy drawing on data from first-year students. Therefore, the measures used in this chapter to interpret retention are data on successful completion of study units.

## The VU Block

### Key Elements

Commencing in 2018, first-year students at VU undertook their study in Block mode, that is, they completed one unit and its assessment within a four-week period before moving on to the next. The Block mode is structured so that each semester, students undertake their chosen degree in four four-week sequential 'blocks' in sharp contrast to studying four concurrent units across a 12 to 16-week semester (Fig. 12.1) and described in detail by McCluskey, Weldon, and Smallridge (2019). This approach is not dissimilar to the Block Plan offered in some North American higher education institutions (Quest University, *n.d.*), and have endured for over 50 years (Colorado College, *n.d.*)

Block learning is supported in an integrated and coordinated manner throughout the student lifecycle at university. For example, co-curricular programmes specifically designed for the first year as Unit Essentials, for the second year as Course Essentials and for the final year as Career Essentials are integrated with the Block units across the semester.

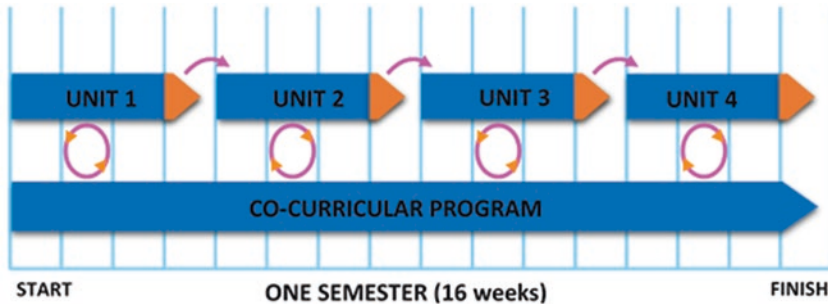


Fig. 12.1 Graphical representation of the VU Block

Comprehensive, multifaceted ongoing support throughout the course connects students to the broader university activities to engage them in peer mentoring services, study groups, language assistance, buddy programmes and career support. Together with the allocation of a Student Advisor for every commencing student and the development of an individualised Success Plan on entry to VU, the co-curricular and personalised support aims to ensure all students receive a quality, contemporary and enriching student experience that goes beyond the formal learning experience (Victoria University, 2019).

## The Block Curriculum Approach and the Retention Rationale

In shaping VU's Block model, critical lessons were derived from the national study on intensive modes of learning including its various benefits, challenges, strategies and recommendations for design and implementation (Male et al., 2016). Also informative were experiences of intensive modes of delivery in the disciplines such as undergraduate science (Harvey et al., 2017), marketing (Ho & Polonsky, 2009), economics (Johnson et al., 2011), second-year pharmacology (Karaksha et al., 2013), neuroanatomy (Whillier & Lystad, 2013), post-graduate business and management (Burton & Nesbit, 2008) and law (Ellis & Sawyer, 2009; Ramsay, 2011).

VU's Block model pedagogy and curriculum design was deliberately designed and built on predictors that have been shown to increase learning gain and promote student success (Chickering & Gamson, 1987; Gibbs, 2010). Experience, extensive research and practice data have shown that investing in the first year is critical (Kift, 2009; Kuh, 2008; Yorke & Longden, 2008), as is to consolidate strong starts with supported transition pedagogies (Funston et al., 2014; Kift, 2009) and so elements of 'transition pedagogy' (Kift, 2009) were influential in designing the first-year experience.

The Block curriculum is highly student-centred. Roberts (2018) notes that an effective retention strategy is deeply learner-centred and student-oriented. It deliberately avoids designing for student deficit and disadvantage but instead builds on the inherent strengths in Australia's cultural diversity and VU's learner diversity. This design includes intentional scaffolding of knowledge and skills acquisition, building of assessment literacy and developmental authentic learning tasks drawn from students' context and lived experience. The entire course is designed to be scaffolded, structured and carefully sequenced. Embedded in this inclusive learning experience are strategies that target and promote twenty-first century skills through active learning approaches, work-integrated learning, collaborative engagement and digitally-enabled learning – all aimed to achieve positive learning gain and successful outcomes leading to motivation and further study.

The VU Block is predicated on a hybrid, blended learning model. Active face-to-face sessions complemented by an online space and other experiential community-based learning provides an integrated learning environment. Social participation is the foundation of learning (Wenger, 2009) and considered critical for retention. Intentionally designed group activities are included to foster belonging and engagement through interaction and collaborative learning (Masika & Jones, 2016). The sense of belonging is also cultivated through combined face-to-face and online interactions (Bryson & Hand, 2007) incorporating preparatory pre-class activities, in-class exploratory independent and collaborative work followed by post-class consolidating tasks, all activities to enhance engagement and success. Communication strategies are purposefully designed to increase engagement and opportunities to interact or work with peers,

teachers and the university at large and establish conditions for dialogue, trust, sharing, connection and to especially foster belonging to a learning community. Further consolidating this effort is the ongoing and integrated co-curricular learning support programme that is aimed at reducing barriers to successful course completions.

One of the correlates with learning gain is smaller cohort and class size (Gibbs, 2010) and another key feature of the Block is the displacement of large, impersonal lectures with longer ‘workshops’ allowing for a more personal and active learning experience. This integrated approach is based on the premise that curriculum and pedagogical design plays a critical part in engaging students in learning and in learning gain. Studying one Block at a time in sequence ensures learners focus in-depth on a single unit rather than four concurrent units and their demand competing for student attention and effort. The VU Block design is captured in seven design principles and seven delivery principles (Table 12.1).

Arguably, staff engagement is just as important in promotion of collaborative learning, and the Block design and development process was based on a carefully constructed blueprint (Fig. 12.2). The process was a team-based, collaborative effort. The design team consisted of a key academic responsible for the discipline-specific information and specialist learning designers, educational developers, librarians, and students who are critical stakeholders. It was deliberate and purposeful tailoring of the teaching and learning context to suit learner levels and student cohort.

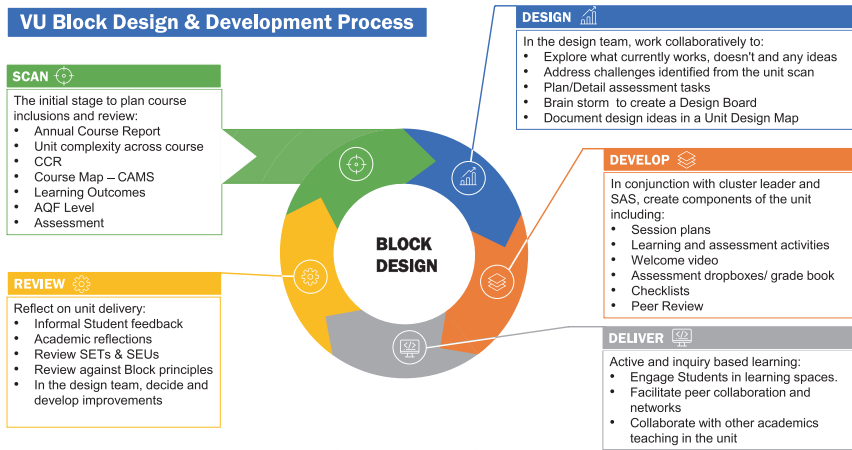
## Emerging Outcomes

With data analysed and visualised by the VU Data Insights Team, Smallridge (2019) reported the outcomes to VU’s Academic Board and they were subsequently published in the literature by McCluskey et al. (2020). Data from the second year of Block mode delivery confirmed that improved results of the first year were replicated in subsequent offerings of the Block when compared to the traditional system and format. While retention is commonly defined by re-enrolment for study in the following semester, retention has also been described as ‘student persistence’ (Tinto, 2017). At VU, the Data Insight Team have also developed

**Table 12.1** Block design and delivery principles

Block design principles	Block delivery principles
(1) Immersive sessions with clear beginnings and conclusions linked to pre-/post-class activities and explicit de-briefings of the learnings to conclude each session	(1) Be student-centred, active and engaging (you are the University – be ‘fabulous’)
(2) Variety of learning opportunities and a variety of assessment tasks (to accommodate student diversity and build depth and explore breadth)	(2) Outline the relevance/connections of units to course and career (show connection with long-term goal, and counter fragmentation of learning)
(3) Developmental assessments, building in collaboration and feedback	(3) Provide early ongoing feedback (help student calibrate their performance)
(a) All assessments to be completed, marked and returned within two working days	
(b) Clear assessment tasks and rubrics indicating requirements	
(4) Knowledge exploration and application not content transmission (active learning not lectures)	(4) Listen to students – their interests, needs/expectations (modify delivery as relevant)
(5) Opportunities for peer feedback and collaboration (using experiential opportunities, learning from peers)	(5) Include opportunities for self-assessment that leads to personalised and adaptive learning (scaffold students to independently recognise personal strengths, weaknesses, appropriateness of responses to tasks)
(6) Predictable timetable: typically 3 hours per day for 3 days per week (enabling students to undertake other responsibilities)	(6) Integrate authentic learning practices (be engaging and relevant)
(7) Design and assessments meet the required standards of the Australian Qualification Framework (AQF) and any professional body conditions/prerequisites	(7) Leverage digital technology as part of the blended learning mix





**Fig. 12.2** The process

retention metrics based on students' results and successful completion of study units.

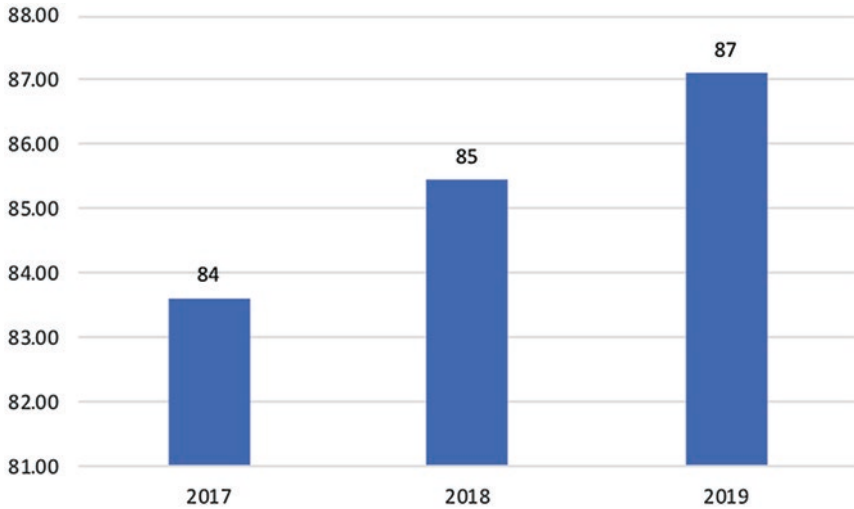
In the first operational year of Block mode, the Data Insights Team analysed 34,462 student results equalling a 4307 effective full-time student load (EFTSL). And in 2019, its second operational year, 34,389 student results equalling 4299 EFTSL were analysed. This large number of results means that the outcomes are statistically significant.

As suggested already, there are many ways to measure student retention. Figure 12.3 reports on semester retention. It measures a student commencing in semester 1 and continuing into semester 2 of the same year. Figure 12.3 shows that overall retention rose from 84% in 2017 by 1% in 2018, and by a further 2% in 2019. This clearly demonstrates that there has been an increase in retention of first-year students since the introduction of the Block in 2018.

Figure 12.4 presents results and grade distribution.

## Grade Distribution of all Students

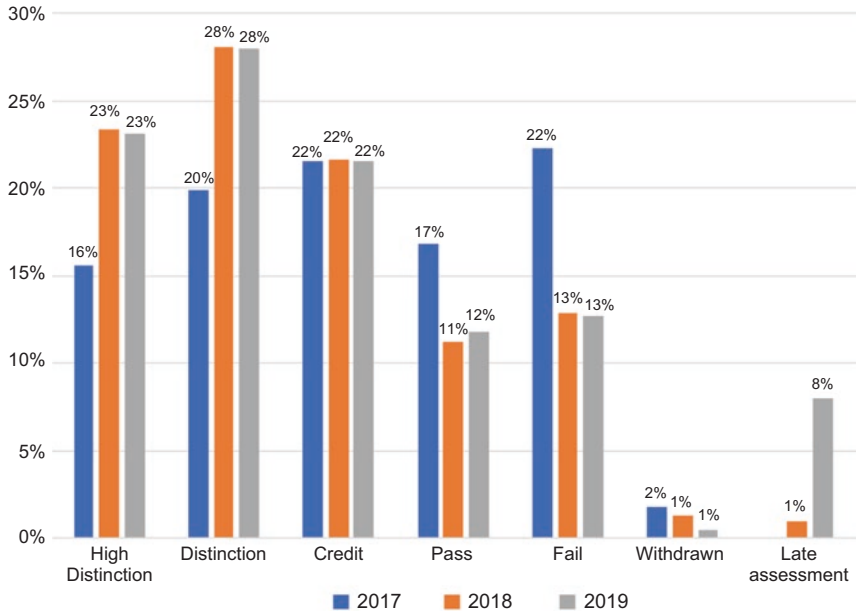
Comparing 2018 and 2019 student results in equivalent units prior to Block mode, shown as a percentage of the total number of student grades



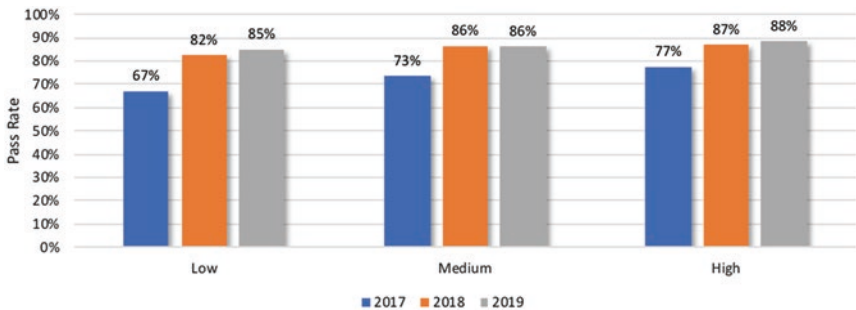
**Fig. 12.3** Comparison of semester retention after the introduction of the Block model in 2017

in each year, indicate a significant decrease in fail grades in 2018 and an increase in the number of distinctions and high distinctions. The results for 2018 clearly indicate that more students have passed their unit and achieved higher grades than in 2017. The 2019 results are equally strong and serve to confirm outcomes achieved in 2018. There was a notable reduction of late assessment submissions and requests for special consideration, perhaps attributable to the focus on one single unit, therefore reducing competing demands.

Similarly, and across the same time series, pass rates for students based on several social parameters such as socio-economic status (SES) (Fig. 12.5), non-English-speaking background students (NESB) (Fig. 12.6), first-in-family (Fig. 12.7) and Aboriginal or Torres Strait Islander (Fig. 12.8) were reviewed.



**Fig. 12.4** Comparison of first-year student results and grade distribution in 2017, 2018 and 2019



**Fig. 12.5** Results comparison – low, medium and high socio-economic status (SES) students in 2017, 2018 and 2019

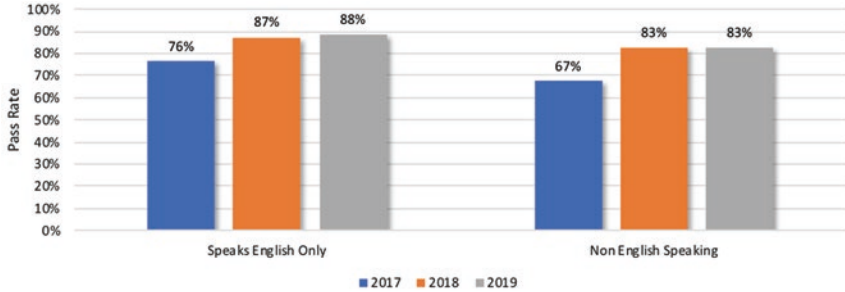


Fig. 12.6 Results comparison – Non-English-speaking background students (NESB) and English-speaking background students in 2017, 2018 and 2019

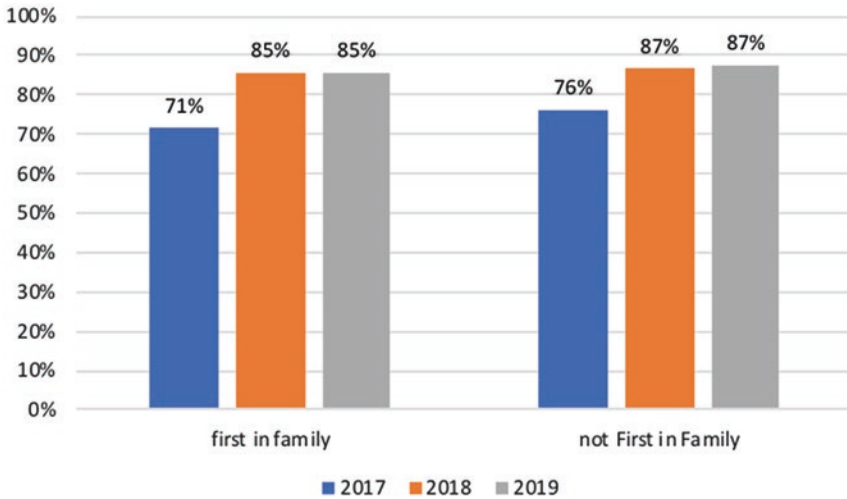
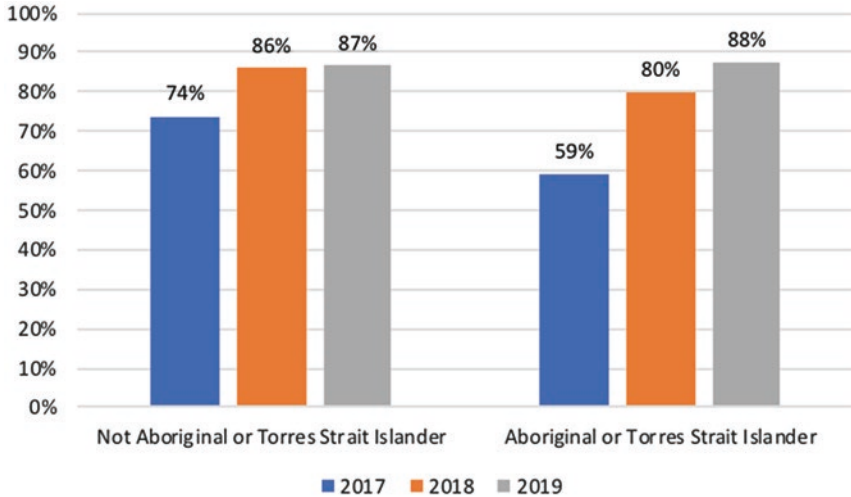


Fig. 12.7 Results comparison – First-in-family students with not first-in-family students in 2017, 2018 and 2019

### Low, Medium and High Socio-Economic Status Students

Data indicated that, while all students studying in Block mode performed better in 2018 and 2019, the greatest and disproportional improvement was among low SES students. Low SES students recorded a 15% improvement in 2018 and a further 3% in 2019 while medium SES students



**Fig. 12.8** Results comparison – Aboriginal or Torres Strait Islander students in 2017, 2018 and 2019

recorded a 13% improvement and remained consistent in 2019. High SES students also recorded an improved performance of 10% in 2018 and a further 1% in 2019. Clearly, students from all socio-economic backgrounds have benefited from the curriculum redesign.

## Non-English-Speaking Background Students

Non-English-speaking background students (NESB) and English-speaking background students showed improved performance in Block mode in comparison to pre-Block delivery. Pass rate of the NESB cohort improved by 16% from 67% to 83% and plateaued in 2019 while English-speaking background students improved by 11% from 76% to 87% and further improved by 1% in 2019. Results indicated improved outcomes among both student cohorts though the most significant improvement was among the NESB group.

## First-in-Family Students

Students who came from a first-in-family background demonstrated a 14% improved performance in 2018 in comparison to the previous year. Strong improvements of 11% were also shown by students not first-in-family indicating positive outcomes among all groups.

## Aboriginal or Torres Strait Islander Students

Aboriginal or Torres Strait Islander students significantly improved their performance by 21% in 2018 in comparison to 2017, and by a further 8% in 2019. Non-Aboriginal or Torres Strait Islander students also improve by 12% under Block mode.

Compared to the 2017 retention rate of 71.87%, much stronger student retention rates were reported (Victoria University, 2018) for domestic first-year students who undertook study in Block mode (Australian Government Department of Education, 2018).

## Discussion

Overall, the results clearly indicate that the re-designed curriculum in Block mode has improved the success rate for students in the first year. Non-traditional students coming from low SES, NESB, first-in-family and Aboriginal or Torres Strait Islander backgrounds, who have traditionally had poorer outcomes in their first-year higher education studies, performed well and recorded significant gains in comparison to the traditional semester and concurrent unit model. The 2018 results demonstrate, and 2019 results confirm, that all students can achieve comparable levels of success, irrespective of their background or prior educational achievements. The curriculum intervention designed as the VU Block, along with many other system and process changes, appears to have better-prepared students for their second year, enabling them to continue their tertiary study. Although conclusive judgements cannot be made at this stage, it is possible that successful completion of units may be

attributed to improved student satisfaction. It is believed that early and continued successful completion of units is positively motivating (for students and staff) and will lead to enhanced retention and motivation for students to continue with study and their chosen degree programme.

These improved results may be ascribed to the consistent and systemic application of Block curriculum design, pedagogy and delivery principles (Table 12.1). Contributing to this is the comprehensive re-think of teaching and learning practices focused on a student-responsive curriculum that is immersive and authentic, designed to master key disciplinary and threshold learning concepts. The curriculum's consistent focus on all students achieving successful outcomes was a determined move away from the conventional models that addressed students' deficits. Concurrent to making powerful curriculum and pedagogical changes, a sound understanding of contemporary learners and the educational context, including a keen awareness of the social, political and economic issues, played a critical role in effective Block design. Importantly, VU recognised it was the institution's responsibility to make curriculum and pedagogical changes to intentionally facilitate learning without placing the sole responsibility of learning on students. The intentional inclusive design of the Block broadened the notion of the curriculum to include the lived experiences and aspirations of learners and may be conjectured as another reason for these early improved results.

Two years of the Block has given a better understanding of risk and the conditions necessary to be successful at VU. Through close consultation and partnering with students on design and improvement, there is a better understanding of what students need and how they like to learn best. For example, the scaffolded activities connected to developmental and formative assessments with immediate feedback enabling students to calibrate performance and make adjustments to study are appreciated, as are those assessments that are educationally purposeful and make explicit connections to future professional selves. Also welcomed and valued by students were curriculum designs that embedded active engagement in study, fostered connections with peers and cultivated a sense of belonging to VU.

## Conclusion

This chapter elaborated on VU's strategy to address the challenge of retention by employing a curriculum overhaul implemented through an institution-wide teaching and learning transformation. The reimagined learning and teaching environment has encouraged a more positive experience through improved results for all, directly improving retention.

These past two years and the resulting seismic institutional transformation presented challenges, many critical lessons, time for reflection and, importantly, significant insights into retention and success. It directly challenged and significantly changed existing academic working practices as well as orthodoxies and customs associated with university education. It confirmed the foundational ethos behind the Block – its small classes, inclusive curriculum, collaborative pedagogies and socio-constructivist approaches are critical to retention and help to ensure that students are engaged and continue to engage with their higher education experience. Encouraged by these promising outcomes, VU continues to structure retention strategies at both the institutional and student level with parallel investments made into technology, resources and workforce capability to strengthen the institution's transformational curriculum strategy to support all students.

In the years ahead, VU plans to make greater use of analytics and the substantial institutional data available to closely monitor student retention and respond to these indicators in a timely and agile manner. Data from national surveys, such as the Student Experience Survey (SES) in Australia, will be used for ongoing observation of engagement and identify issues that lead to attrition. This data must be complemented by a more in-depth understanding of retention and the interconnections with curriculum, engagement and changing learner cohorts and needs – an area for several potential future large-scale studies. In addition, close attention to ongoing reviews and student feedback must inform improvements and further enhance the offerings that will, in turn, improve student performance. Operating in an unknown future, the agility to change and adapt to suit the complexities of a changing social, political and economic environment will be critical to maintain the successes reported in



this chapter. Therefore, a closer analysis of what it means to be successful and the factors that contribute to retention is worthwhile, especially since the Block is still in its 'early days' and therefore a 'work in progress'. Nevertheless, these results obtained over the first two years of implementing the Block are early indicators of its effectiveness and impact on the success of students in their first year and beyond.

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# 13

## The Role of Professional Integration in Higher Education IT Studies

Küllli Kori and Margus Pedaste

### Introduction

As the role of information technology (IT) keeps growing in society, IT specialists are increasingly needed in the labour market. Estonia is known as the birthplace of many IT solutions and start-ups, and studying IT is generally a popular choice amongst Estonian students. Many comprehensive schools in Estonia provide either compulsory or optional IT studies as early as in primary school, and it is not uncommon for kindergarten-age children to start learning skills that lead them to become interested in IT. This has, for example, been supported by using educational robots (Altin & Pedaste, 2013) or games such as AutoThinking (Hooshyar et al., 2019, 2020a), which support computational thinking skills, or

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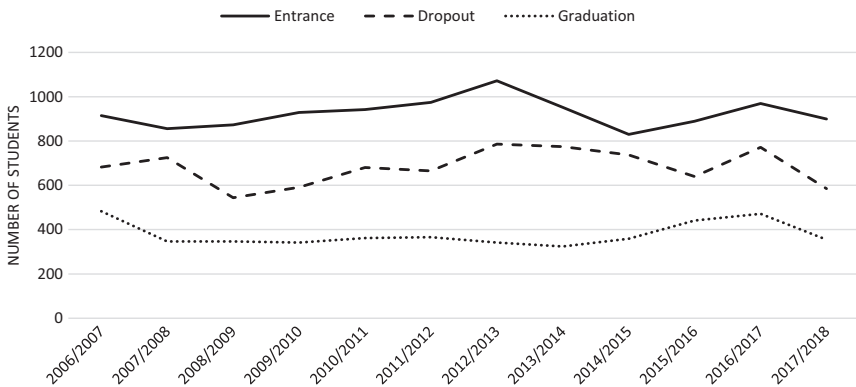
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web-based simulations that blend the inquiry approach with IT (de Jong et al., 2010; Pedaste et al., 2013).

In Estonia, student enrolment into IT courses is very competitive. Their motivation to do so originates from their previous personal contact with IT, the reputation of the IT field, the development opportunities the IT field offers or the field itself being in continuous development (Kori et al., 2016a). However, even though the students are motivated to enter higher education, there are still a high number of students who do not graduate. The annual number of IT students who drop out is much higher than the annual number of those who graduate (based on HaridusSILM database, n.d.). Figure 13.1 presents the entrance, attrition and graduation rates between the academic years of 2006–2007 to 2017–2018 in 3-year bachelor and applied higher education IT studies in Estonia.

Other countries also face similar problems. For example, a study in 15 European countries has shown that retention is a serious problem as the number of IT students who actually graduate each year is less than half of the number of IT students who enrol in the same calendar year (Pereira, 2016). Based on a systematic literature review of 161 introductory programming courses that run in 15 different countries, the worldwide pass rate was 67.7% and no significant improvements were found over time



**Fig. 13.1** Entrance, graduation and attrition rates registered in Estonia between the academic years of 2006–2007 to 2017–2018 in bachelor and applied higher education IT studies

(Watson & Li, 2014). The pass rates varied by different countries, grade levels and class sizes, but were not affected by programming language taught in the course (Watson & Li, 2014). In the case of online programs – for example various Massive Open Online Courses (MOOCs) – the probability of graduation is much lower. Therefore, the risk of decreasing graduation numbers is especially important in the light of the spread of COVID-19, as many higher education institutions have transitioned to fully online delivery mode. The low academic success of students requires investigation on how to retain the existing IT students and get more IT workers in the labour market regardless of the mode of their studies. Moreover, as higher education is supposed to prepare students for their future work, there is a need to examine how universities support students in becoming professional learners and how to support their professional agency; their ability to think of different alternatives in the professional decision-making process and to choose between them based on their competencies, goals, and characteristics of the professional situation (Leijen et al., 2020). This chapter focuses on the case of IT studies in Estonia and aims to discuss the causes of student attrition, strategies to improve retention, and how the university prepares IT students for their future work and supports them in becoming professional learners. In addition, potential effects of COVID-19- related restrictions on student retention and graduation are discussed.

## Student Motivation in IT Studies

Retention in higher education is affected by admission itself, as the reasons why students choose to study IT may have an effect on their decisions during the studies. For example, in the case of IT studies students are attracted by the expected high salaries in the IT labour market, but they could also make a socially desired decision without having a clear understanding of what studying IT actually means and without any intrinsic motivation to make an effort to become a specialist in the field. Therefore, it is also important to study the students' reasons for entering higher education. Our case study shows that when IT students in Estonia were asked the question 'What are the main reasons that influenced you

to apply to an Informatics or Information Technology related course?’ during the admission, the answers were categorised into 14 groups (Kori et al., 2015a). Many of the reasons for applying to study IT were related to intrinsic motivation. These include, for example, interest in IT, self-realisation of what the IT field offers, and personal development. More than half of the students mentioned their interest in IT, which has also been found to be the main reason why people participate in IT-related MOOCs (Luik et al., 2019). As earlier studies with first-year IT students have shown, the interest is mostly generated by hands-on experience of doing something in the IT field, for example solving computer-related problems, learning software development or trying to make a computer game (Kori et al., 2014). The importance of previous IT experience also emerges from the student responses. The categories that include prior experience add up to 39.5% (including prior experience with IT, a wish to continue the IT studies that they have already started, the IT field suits them well based on their previous experience, a need for more IT skills at their current job, and liking the IT field). Thus, the first suggestion based on the Estonian experience is that in order to increase retention in IT studies, the admission procedure should identify the previous experience students might have in IT, as well as their intrinsic motivation – in contrast to extrinsic motivation, which does not have sufficient predictive power to ensure the retention of students. Studies investigating retention in IT studies have also found that prior experience in programming (Hagan & Markham, 2000; Kori et al., 2016b) and mathematics (Niitsoo et al., 2014) plays an important role in students’ academic achievement, which could influence retention.

In addition to interest in IT, and experience in IT that students gain through formal and informal education, many students expressed the importance of extrinsic reasons for applying to IT curricula (Kori et al., 2015a). These reasons were as follows: a need for more IT skills at their current job; possibility of earning a good salary in the IT field; jobs and career opportunities in the IT labour market; scholarship that is offered to IT students; a wish to study the constantly developing IT field; and the importance of the IT field for the future. Several of these reasons highlight the importance for the students of working in the IT field. Moreover, our case study shows that about 8% of the first-year IT students in



Estonia are already working in the IT field at the beginning of their studies, 14% have prior work experience in IT, and the majority of IT students are considering working in the IT field while still studying (Kori et al., 2014). The most important reasons for working during their studies are earning more money (42%) and getting work experience (28%) which is valued in the labour market. Thus, students would like to be more integrated in the professional network to increase their probability of finding a job in the future or to start earning income to cover their living costs during their studies. Therefore, a further suggestion for ensuring students' interest but also retention in higher education IT studies is to provide a flexible programme that enables students to combine their studies with practice and even real work opportunities as an employee of an IT company.

The importance of such employment opportunities has also been shown in other countries. For example, Divjak, Ostroski and Palma (2010) found that in Croatia, employment opportunities, such as those for advancement, a good income and additional jobs, influence people's motivation for choosing an IT-related career. As there is a shortage of IT workers in the labour market, IT companies in Estonia often offer jobs to IT students, who are therefore struggling with combining their work and studies. This amplifies the problem of student retention.

## Cause of Student Attrition in IT Courses

### Difficult Subjects and Workload in IT Courses

Several studies have investigated retention issues in IT-related courses and IT curricula. For example, Kinnunen and Malmi (2006) investigated the reasons why students drop out from an introductory course in programming in Java. They found that the students complained about the programming assignments being too difficult and taking too much time; some students started doing the assignments too late and did not have time to complete them before the deadline; and some would have needed more help doing the assignments. This indicates issues of students'

self-regulated learning skills (Panadero, 2017), which become especially important in online learning. The most common reasons for dropping out of the Java course were lack of time and lack of motivation. Both were affected by factors such as difficulty of the course; difficulties with time management and planning the studies; and the decision to do something else. Due to COVID-19 and transition to online learning, many students have been impacted due to lack of interaction between peers, teachers and a range of staff who provide learning and other support. This was also one of the concerns that teachers had while teaching during COVID-19 pandemic (van der Spoel et al., 2020).

Relatedness, however, has been defined as one of the three main determinants of motivation according to the self-determination theory (Deci & Ryan, 2008). A similar problem has been detected in online introductory computer science courses. Benda, Bruckman and Guzdial (2012) found that the time requirements of programming assignments were unpredictable for the students: the assignments took more time than expected and caused the issues of needing to divide time between studying and other commitments. Also, the students did not receive enough help from the instructor. This suggests that IT studies can be more difficult and time consuming than students often think.

The transition from high school to university is challenging for students, but in IT studies the situation is exacerbated by difficult subjects such as mathematics and introductory programming, usually in the first year of study. Failure rates in programming courses are high. Based on a systematic literature review, the global pass rate of introductory programming courses is only 67.7% (Watson & Li, 2014). In addition, Divjak, Ostroski and Hains (2010) have found that mathematics courses are the main obstacle for retaining IT students. The difficulty of these subjects may decrease IT students' motivation to continue their studies.

A few studies in Estonia have also investigated this problem. Some students have learned programming (e.g. in high school or independently) before entering higher education IT studies. Kori et al. (2016a, b) found that those students are at an advantage (i.e. better grades) compared to those who study programming as part of the first-year curriculum. This suggests that all students should have an opportunity to learn programming at the general education level, as it gives the students a

better understanding of what programming is and helps them to decide if they would like to continue studying IT at the higher education level; and if they decide to do so, the first courses might be less challenging for them. In addition, Niitsoo et al. (2014) found that besides time spent on studying, prior mathematics achievement is an important predictor of students' academic performance in the first semester of higher education IT studies. Hence, prior knowledge of mathematics also makes IT studies less challenging for students.

Interviewing the students who dropped out of higher education informatics or computer engineering curricula in Estonia during the first year of their studies revealed that the main reason for dropping out was that the students discovered during their studies that IT was not the right choice for them after all (Altin & Rantsus, 2015). As IT is a rather popular field of study in Estonia, it might be that several students choose it because of its reputation, positive job outcomes and salaries in the IT labour market. However, during the studies they may find that the courses are difficult and take more effort than expected. Also, it was reported in the same study that some students were working in the IT field before entering IT studies and several of them found that the studies did not meet their expectations and they did not acquire any new knowledge because of their prior experience. This might be because IT curricula begin with more general mathematics and base level courses, but people who already work in the IT field might be more interested in technical areas that are not discussed during the first year of studies. Student also had difficulties in managing time between working and studying.

Most of the challenges discussed above are linked to academic issues (e.g. study load, difficult courses, studies not meeting the expectations), but a few studies have also looked into issues related to social integration in the retention of IT students. For example, McCartney et al. (2016) found that social and peer interactions are among the main factors that influence students' motivation and self-regulated learning in computing studies. Students would like to be part of a group and provide peer support in learning. These findings are in line with the self-determination theory introduced above (Deci & Ryan, 2008). In addition, Barker, McDowell and Kalahar (2009) found that interaction between students is the most powerful predictor of students' intention to persist after the

introductory course. Thus, one more suggestion for enhancing the retention of IT students would be to ensure that universities invest their effort in campus life activities but also in designing curriculum that facilitates interaction and engagement with peers and teaching staff.

## The Effect of COVID-19 Pandemic on Student Attrition

During the COVID-19 pandemic, interactions between students and teaching staff was impacted due to closure of campuses (Toquero, 2020). Thus, students and teachers had fewer face-to-face contacts and increased use of online technologies in teaching and assessing students. Adnan and Anwar (2020) found that almost 80% of the students felt during COVID-19 pandemic that face-to-face interactions with instructions are needed for effective learning. The loss of social interaction possibly had a negative effect on IT student retention; also, during this period many students as well as teachers recognised the importance of social interaction. Therefore, when learning takes place online, it is still important to put an effort into fostering socialisation. However, as suggested earlier, in these situations motivational and emotional regulation of the learning process should also be supported (Hooshyar et al., 2020b; Panadero, 2017).

In addition, the COVID-19 pandemic caused multiple rearrangements in the studies of higher education institutions and in students' personal lives. During this period most of the university courses were conducted online; but online learning raises new challenges compared to face-to-face learning (Yang et al., 2013). A study on general education level showed that teachers were concerned about the low level of interaction between students and teachers and between students. They also found that online learning impacted on: support of student well-being; disengagement in attending online lectures and tutorials; academic performance of students; and teachers' ability to teach and use learning technologies (van der Spoel et al., 2020). Teachers were also struggling with designing assessments for the online environment and students were struggling in IT units that require the use of labs and specialist software.

Köning, Jäger-Biela and Glutch (2020) found that ICT tools and teachers' digital competences were necessary in adapting to online teaching during COVID-19 but online teaching and online assessment were not mastered by the teachers. Although IT students and IT teachers in universities are expected to have a certain level of digital skills, getting used to the new online learning environment takes time. And in addition to learning to adapt to the new environments, it was important to find the most effective way to use online technologies in teaching and supporting student learning. Therefore, university teachers also needed more pedagogical knowledge to teach online.

## Model of IT Student Retention

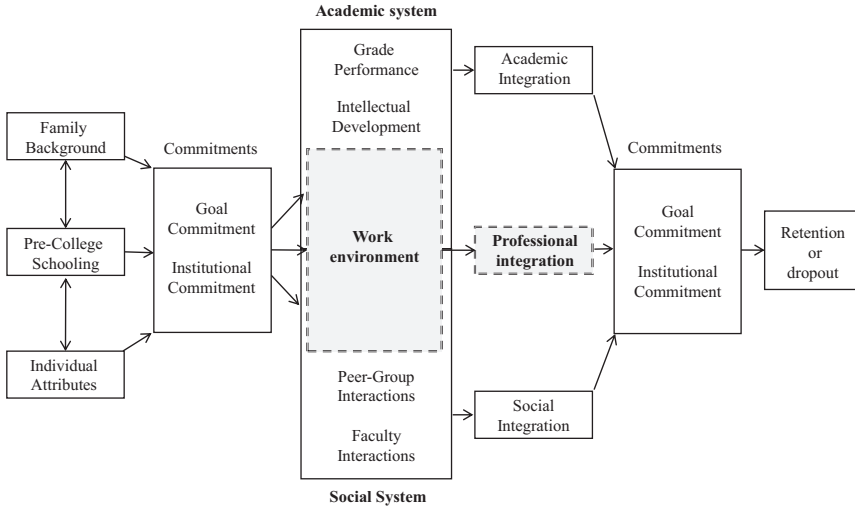
Many of the factors that influence retention or attrition in higher education can be found in the literature (e.g. Kori et al., 2015b; Larsen et al., 2013). Less complex models of retention could give a more focused overview of what to consider when designing interventions to improve retention rates. Our case study investigates the role of academic, social and professional integration in higher education IT studies in Estonia. The model consists of academic and social integration, which come from Tinto's model (1975, 1993), and professional integration, which is based on the What Works? model (Thomas, 2012). We created a model that predicts Estonian IT students' graduation-related self-efficacy (Kori et al., 2017). This means that the model predicts students' opinion about the probability of them graduating from their higher education IT studies. The model has two parts: professional-integration-related variables (including prior work experience in the IT field and the probability of starting work in the IT field) and academic-integration-related variables (i.e. average grade, how well the studies meet students' expectations, intrinsic motivation). In addition, this model describes how gender could have a role to play in these variables. The work-related aspects turned out to be much more predictive of graduation-related self-efficacy than the academic-integration-related variables. The model did not concern social integration, however social integration could be related to professional

integration, as a student who is working in the IT field is socially integrated into the IT workers' community.

The role of academic, social and professional integration in IT student retention was further investigated by Kori, Pedaste and Must (2018). In this case study four profiles of first-year IT students were distinguished that should be considered when developing strategies to increase retention rates: (1) students who have work experience in the IT field but do not believe that they will graduate (4%); (2) students who do not have work experience in the IT field and do not believe that they will graduate (25%); (3) students who do not have work experience in the IT field but believe that they will graduate (6%); and (4) students who have work experience in the IT field and believe that they will graduate (65%). The profiles were similar in academic-integration-related variables, such as studies' accordance with expectations and intrinsic motivation.

Interesting differences appeared in professional integration (e.g. IT work experience, estimated probability of working in the IT field), graduation-related self-efficacy, and the second semester average grade. As professional integration has an important role in dividing students into groups with different profiles, universities should pay attention to the professional integration of IT students while developing strategies to improve retention rates. In order to increase professional integration, some changes are needed in the university curricula. For example, work-integrated learning could be implemented in the studies in the first year to integrate students professionally. However, this requires collaboration with IT companies to organise the workplace-based learning. IT companies and higher education institutions need to demonstrate motivation and commitment to develop such efforts.

Based on our case studies (Kori et al., 2017, 2018), Tinto's model of academic and social integration was extended by adding work environment and professional integration as new elements in the model describing important factors for ensuring retention in higher education studies (see Fig. 13.2) (Kori, 2017). Work environment is closely related to academic and social systems, as students are academically integrated when they solve work-related problems and develop themselves academically; and they are socially integrated at work when they interact with other people who work in the IT field.



**Fig. 13.2** Theoretical model predicting retention and attrition in IT studies (Kori, 2017)

## Strategies to Improve Retention in IT

Many studies have presented suggestions as to what can be done to improve retention rates. For IT studies, researchers have suggested, for example, that as attrition is a complex problem, simple actions to improve teaching or organisation of an IT course may be ineffective; an effective intervention requires a combination of different actions and considers the versatile nature of attrition reasons (Kinnunen & Malmi, 2006). Altin and Rantsus (2015) studied previous students who had dropped out of IT studies and asked their opinions about what should be changed in IT studies. Students who withdrew suggested making mathematic and programming-related subjects easier or decreasing the study load of these courses, as the transition from secondary school level mathematics to higher education level mathematics was too rapid. In contrast, Kori et al. (2016a, b) suggested making changes in secondary education and improving students' opportunities in gaining programming experience prior to higher education studies. This could also help students to get a better understanding of what to expect of higher education IT studies.

In addition, researchers have suggested improving teaching methods and teachers' pedagogical skills for higher education IT studies to increase retention rates (Järve et al., 2015). For example, implementation of project-based learning could motivate students and support their learning in computing (McCartney et al., 2016). The issue with IT teachers' pedagogical skills also emerged when teachers were suddenly forced to start teaching online because of the COVID-19 pandemic. Universities could offer more flexible study times and different study forms (e.g. distance learning, evening studies, online courses) to increase retention rates (Järve et al., 2015). This is especially important for retaining students who are working during their studies. However, it is also a necessity when providing education during the COVID-19 pandemic. In addition, Borzovs, Niedrite and Solodovnikova (2016) recommended creating self-assessment tests for potential students (e.g. personality test, logic test, mathematics test). The tests would help students to understand if higher education IT studies are right for them and also help universities to find the best IT students who are more likely to graduate.

In order to cope with the attrition problem, learning analytics need to be integrated in learning management systems to detect the potential issues as early as possible. For example, students' self-regulated learning should be supported in cognitive and metacognitive areas, but also in motivational and emotional areas (Panadero, 2017). Recent years have provided powerful methods for this; for example, clustering and feature-based prediction algorithms based on student activity data in Moodle (Hooshyar et al., 2020c; Yang et al., 2020). This becomes particularly important in situations where students need to study online more than usual, as was discovered during the COVID-19 pandemic. Open learner model is a learning analytics method that is more and more used to support online learning. However, a recent review on how open learner models have been used in higher education online learning revealed that online learning is not supported enough. The support has mainly focused on cognition, slightly less on metacognition and motivation, but the support of emotions has rarely received any attention (Hooshyar et al., 2020b). In online learning, students do not have face-to-face meetings and in this situation it is more difficult to express emotions and interpret those expressed by others. Therefore, the COVID-19 pandemic might



negatively affect students' progress due to lack of timely support in the online learning environment. The restructure of universities and downsizing of staff would further impact institutional ability to provide just-in-time support to students.

Only a few studies have taken a practical approach and applied strategies to increase retention rates in IT studies. The University of Illinois has organised a Scavenger Hunt for new students, which is a community building activity that helps students make friends, feel part of the department and has increased the retention rates (Talton et al., 2006). Online events could be useful in engaging students and also increase interaction with peers and teachers otherwise restricted during the lockdown period when they have no face-to-face teaching. Social online events can increase social integration which is an important part of student retention (Tinto, 1975, 1993). The University of Latvia is offering a mentoring program for first-year students, which has also resulted in higher retention rates (Borzovs et al., 2016). The same university also offers remedial mathematics courses to students who achieved low academic performance in the mathematics exam. However, based on our previous studies, which show the importance of professional integration (Kori et al., 2017, 2018), we suggest that a successful strategy for increasing retention rates in IT studies should focus on preparing the students for future work and supporting them in becoming professional learners.

## Professional Integration in IT Studies

Traditionally, academic results have been the planned focus of studies in higher education institutions. It means that the curricula have been designed according to the structure of the field of studies so that students achieve proficiency in academic competence. In many areas this competence has been described by the members of professional communities in professional standards. It has been so for IT engineers as well. In the context of teacher education, Pedaste, Leijen, Poom-Valickis and Eisenschmidt (2019) give an overview of three aims of professional standards and combine these with the requirements, qualities and benefits of professional learners. The new framework provided in their study could

be used to analyse professionalisation in different fields, including IT. According to the framework, professional standards should describe the performance required to work in a certain field, but they should also support ongoing professional learning when working in a profession and serve to uphold the standing of the profession. We believe that the last aspect is particularly interesting because this is not something that has usually been considered as part of academic programs. The standing of the profession has been considered as a professional frame that connects learners to the professional community. Thus, it is in line with our previously introduced view that in addition to academic and social integration described in Tinto's model, we need to focus more on professional integration to ensure retention in higher education studies (Kori et al., 2017, 2018). This means that we should revise the academic programmes so that they intentionally provide students with experience that increases not only their academic integration but also their social integration and certainly their professional integration. This is required to support students in becoming professional learners who are able to reach graduation.

Previous studies with Estonian IT students have also confirmed how important it is to focus on different academic aspects in IT programs (e.g. Altin & Rantsus, 2015; Kori et al., 2016a, b, 2017, 2018). We created a path analysis model for this chapter to describe how students' graduation in higher education IT studies could be predicted based on different factors. We used graduation as a categorical variable but using it as a continuous variable indicates that this model could predict about 25% of the graduation variability using seven factors describing academic, social and professional integration. In this study, three levels of graduation were described. We used a dataset of students who started their studies in 2013 and had to finish in 2016. In 2017 (one semester after the expected graduation) we examined if the students had graduated (the best score), dropped out (the lowest score), or were still studying and could potentially graduate with a delay (the score in the middle). There were four factors out of seven that had a statistically significant regression on graduation. By comparing the standardised regression coefficients, we found that academic outcomes were the strongest predictor of graduation. In this model we used students' grade point average in the second semester of the studies (the studies consisted of six semesters in three years). A

better grade point average predicted a higher probability of graduating, which was not surprising. In addition, we found that students could predict their graduation quite well towards the beginning of their studies – students' graduation-related self-efficacy also strongly predicted their graduation. However, it was interesting that two other factors describing academic integration – how well the studies met the students' expectations and how high was the students' intrinsic motivation to study – did not predict graduation statistically significantly. Furthermore, the regression scores, although low, were negative, showing a slightly surprising trend indicating that studies meeting one's expectations or being internally motivated might be less accurate predictors.

Indeed, the most valuable outcome of this study was that we confirmed the importance of both social and professional integration in student retention. Social integration was assessed by a factor describing the number of people who study or work in the IT field and belong to the social network of the students. The data from the first and second semester were combined, and it was found that social integration positively predicted students' graduation. However, even more surprising was the negative regression of professional integration on graduation. Under this factor students were asked about the probability of them starting to work in the IT field, and, again, the scores of the first two semesters were combined. This finding showed that the higher students' estimated probability of starting to work in the IT field, the lower the probability of graduation. This is an extremely important finding because professional integration was a very strong positive predictor of graduation probability. The estimated probability of graduation was understood as a self-efficacy measure. Thus, it appeared that self-efficacy was not in line with students' actual behaviour in this case, and this finding needs more discussion.

The findings might be interpreted as follows: even though students would like to graduate to start working in the IT field, it may be that they already started working during their studies, which leads to a situation where the actual graduation is affected by the workload. It could explain why professional integration predicts graduation and graduation-related self-efficacy in different directions. This is an important finding to consider in designing higher education studies and strategies for increasing retention rates but also continuous professional learning so that it

supports not only academic and social integration but also professional integration. One of the options might be integrating studies and work – designing workplace-based study programmes that allow students to work in their profession and get paid during their studies. Of course, this might extend the studies, but it could help avoid the situation where studies are not completed. These types of studies might also have a positive effect on academic integration because the studies might be more meaningful for the students – this way they would gain wider professional experience during their studies, which may increase their meaningfulness. In addition, it allows higher education institutions to rely more on students' personal experience and design assignments where personal and professional histories are combined, and personal and professional purposes are merged.

## Workplace-Based Learning

Organising workplace-based learning for IT students requires collaboration between universities and IT companies. The importance of workplace-based learning has already been shown, for instance, in medicine (Karani et al., 2014; Rees et al., 2016) and teacher education (Gijbels et al., 2017; Leijen et al., 2015), as it merges knowledge that students gain from the university education and practice that they get in the workplace (Raelin, 2008). To make work-based learning more meaningful, a reflection procedure should be linked with the practice (Leijen et al., 2015; Raelin, 2008; Rees et al., 2016). This means that universities should include reflection in the work practice and guide it so that students could gain new practical knowledge that could be applied both at university and at work. The importance of work-based learning is also found by Kivinen and Nurmi (2014), who found on the sample of 12 European countries that students who are older and have work experience in the field of their studies will find professional employment faster after graduation, whereas young students who graduate quickly need a longer period after graduation to start their professional career. This means that it is beneficial for students to work during their higher education studies. If curricula were designed in collaboration with IT

companies and included work-based learning, it would be easier for students to combine work and studies, which supports student retention.

However, support for academic, social and professional integration might not be enough to become a professional learner. According to the model introduced by Pedaste et al. (2019), professional standards are successfully applied if two requirements are met: commitment and integrity. It means that students need to commit their time and focus in becoming a professional. In addition, they need to achieve integrity in their field by connecting their professional and personal purposes. This has been reflected in the ecological model of agency introduced by Priestley, Biesta and Robinson (2015) and specified further by Leijen, Pedaste and Lepp (2020). According to this model, agency is formed in a practical evaluative situation based on professional competence and purpose. However, professional competence will be formed based on professional studies (what has been learned) and personal histories (what has been experienced). If the learning experience and personal experience are not supporting each other then there is a conflict between them, which does not allow the formation of consistent professional competence. In the same manner, purposes can be divided into personal and professional. In every profession, society expects all people working in this profession to do the same thing and provide the same 'service'. However, every person has their personal life goals, which need to be taken into account to set short-term goals. If the personal and professional purposes are not in line with each other, professional integration may be difficult to achieve. Therefore, higher education studies should also focus on the background of students instead of just strictly following the pre-defined academic programme. Studies should be adapted to the learners to provide a personalised pathway to becoming a professional.

## Conclusions

This chapter focused on the case of IT studies in Estonia and discussed the causes of student attrition, strategies for improving retention, and how the university prepares IT students for their future work and supports them in becoming professional learners. In addition, the challenges

resulting from the COVID-19 pandemic are discussed. The retention of higher education IT students is critical due to the challenges faced by students in integrating with academic and professional education. Studies with higher education IT students showed that in addition to academic and social integration, integrating IT students professionally has a major effect on students' graduation-related self-efficacy. However, when examining actual graduation data, a negative effect of professional integration was found. It could be that even though students would like to graduate to start working in the IT field, they already start working during their studies and then the actual graduation is affected by the workload. This is an important result that should be considered in the design of strategies to increase retention rates and the design of IT curricula, which should be prepared and implemented in collaboration with IT companies, who could provide the students with practical training. Including workplace-based learning in the curriculum, for example, could be an attractive solution, as it may make studies more meaningful for the students by offering them professional experience. This needs better collaboration between universities and IT companies. In addition to retaining students in IT studies, it is also important to retain students in the IT profession. Therefore, the study programmes should provide students with experience that increases not only their academic integration but also social and professional integration to support them in becoming professional learners.

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# 14

## Retention and Success in the Midst of a Pandemic

Sally Kift, Liz Thomas, and Mahsood Shah

### Student Retention and Success in Universities

As this book publishes in 2021, higher education has much heavy lifting to do. All of humanity, its economies and societies, are being pummelled by waves of pandemic-induced crises. COVID-19 has accelerated Industry 4.0 labour market disruption – the technological change wrought by automation, digitisation, artificial intelligence (AI) and robotics – in tandem with globalisation and demographic shifts. And the pandemic's impact has amplified many of the pre-existing trends and challenges canvassed in this collection. Particularly, we continue to struggle with the economic and social imperatives to widen educational

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participation and to improve attainment levels, especially among those with low levels of both. Our sector is quite rightly expected to make a significant contribution to economic regrowth, job creation and innovation; our social contract with society for the global common good depends upon it.

In this shifting environment, student learning, success and retention are core business, but can no longer be business-as-usual. Just as the world changes around us, so too must our conceptualisations of ‘retention’ and ‘success’ correct to accommodate the uniqueness and diversity of our individual students, communities, institutions and stakeholders, each of whom has their own specific expectations and motivations. As this volume evidences, success in particular is complex and multifaceted, influenced by many situational, institutional and dispositional factors (Higher Education Standards Panel, 2017) that interrelate in idiosyncratic and changeable ways. For example, for Australian Aboriginal and Torres Strait Islander students, Fredericks and colleagues (2015, p. 17) observe that ‘what constitutes “success” remains an important question that must be addressed from the different perspectives of the Indigenous student, the institution, the government and the broader Indigenous community’. For Indigenous students, it has been said that non-completion is not necessarily considered a failure (Cunninghame & Pitman, 2020); for some, even partial completion may be counted as success in terms of the development of work-related skills at a higher level than before (Asmar et al., 2011, p. 12). However, significant gaps remain between Indigenous and non-Indigenous learners in terms of completion rates (Higher Education Standards Panel, 2017).

Success is arguably, therefore, more of a process than a fixed outcome; one that can be achieved differently and over divergent timelines. In this vein, the seminal Australian national equity framework, *A Fair Chance for All* (Department of Employment, Education and Training, 1990), set out a sequence of success measures specific to stages of the student lifecycle – access, participation, retention and success. This temporal rendering has served Australia well, with attention focused on student transition points of system vulnerability. More recently, however, researchers have advocated for a more ‘sophisticated perspective’; one that shifts ‘focus from input-side considerations of access and participation, to an

outcome-based conceptualisation of success' (Naylor et al., 2016, p. 264). In Ireland, a recent national exercise to develop a shared understanding of 'student success' and its enablers suggested that a change in focus was required from 'retention' to 'engagement' (National Forum for the Enhancement of Teaching and Learning in Higher Education, 2019, p. 2):

Retention may be underpinned by an implied position that success is binary and can be understood solely in terms of persistence. Engagement as a driver focuses on the iterative, ongoing and multi-faceted relationship between students, their learning, their teachers and their institutions.

What this collection makes particularly clear is that a more nuanced construct of success renders it so much more than retention and completion rates. Indeed, there is a relational and cultural disjunct in the educational psyche between retention and success. As Tinto says (2017, p. 254):

For years, our prevailing view of student retention has been shaped by theories that view student retention through the lens of institutional action and ask what institutions can do to retain their students. Students, however, do not seek to be retained. They seek to persist. The two perspectives, though necessarily related, are not the same.

Zepke (see Chap. 4 in this book) similarly observes that 'student and institutional success objectives connect but are not the same'. He notes the institutional focus is on increasing graduation and employment success, while students 'want to succeed by meeting their own goals and these may be more complex than passing courses or gaining qualifications'. These are salutary reminders that success is a shared responsibility between university and student; both need to adapt to bridge otherwise intractable socio-cultural incongruity (Devlin et al., 2012; Zepke et al., 2005).

In the end, however, it comes down to learning: 'The more students learn, the more value they find in their learning, the more likely they are to stay and graduate. In the final analysis, student learning drives student retention' (Tinto, 2002, p. 4). Success, in its various representations in this volume, is given concrete expression by the what, why, how and

when of student learning and the value, sense of belonging, sociability and self-efficacy individuals find in that learning. If anything, the impact of the pandemic has served only to underscore that fundamental tenet. The implications for our universities are profound. Our sector is challenged by this latest wave of disruption to embrace learner-centred innovation for a better normal. As we work with our students as partners (Cook-Sather et al., 2014), the exhortation is to assure coherent, coordinated and comprehensive – whole-of-institution – responses that transcend traditional and clumsy atomisation, so often driven by the metrics that have extrinsically incentivised us to date.

The conceptualising in this volume is robust, collective, evidence-based and global. It is inherently and deeply strengths-based; cognisant of changing student demographics that now include learners of all ages, many of whom are older, more diverse in preparedness and studying longer. Contributions are inclusive of the ‘whole student’ and proposed with whole-of-institution coherency. Many are curricular focused. In our international efforts to proactively support retention and success, it is our students’ understandings and articulations of their own success that must guide action. Our responsibility is to remain ever vigilant and adapt our language, course design and delivery, services and support, and policies and processes to assure the best chance for all.

In Chap. 1, we set out some recurring themes in the book, which reflected the philosophical positioning of the editors and authors. This chapter will canvass these themes holistically and consider particularly the meta impact of COVID-19 on the book’s foci. It will canvass disruption-driven, whole-of-institution and curricular good practice, with specific attention directed to COVID-19’s acceleration of issues around mental health and wellbeing, assessment design, learning analytics and engaging with students as partners. Throughout, further success opportunities will be highlighted for attention for a new era of cross-institutional and cross-sectoral solidarity.

## COVID-19 Disruption: Shared Leadership and Responsibility for Lifelong Learning Success

Between the commissioning of chapters for this work and its finalisation, COVID-19 swept around the world and into our institutions. The crisis has served to sharpen the consequential nature for success of each of the themes identified in Chap. 1. It has also highlighted the salience of other foci that lurk perennially in the educational background. The focused prosecution of learner retention and success as a shared leadership responsibility for all – students and staff within institutions and the broader, external community of government, industry and society – is becoming evident in the pandemic's wake. Though COVID-19's effects have been most acutely observed in terms of labour market uncertainty and workforce precarity (Bennett, see Chap. 10), with attendant implications for graduate employment outcomes and perilous student finances, as many chapters have also observed, few aspects of the student lifecycle have remained untouched. Indeed, COVID-19 has reverberated across, and affected to varying extents, each and every of the 'potential loci of internal structural inequalities: staff, students, curriculum, administration, campus life and the physical environment' (Naylor & Mifsud, 2019, p. 2), to which we should also now add the digital environment.

As is usually the case, the burden of disadvantage has not fallen evenly (Harvey, 2020) and both structural and systemic fault lines have been exposed. How sector leadership addresses enduring barriers to assuring success for all students globally, particularly disadvantaged students, is benefiting from renewed focus. Of particular concern, though not the focus of this work, is the potentially stultifying effect COVID-19 will likely have on the widening participation agenda and its hard-won gains (Canning, 2020), especially given: its exacerbation of schooling inequity in lockdown (Drane et al., 2020); the shift from face-to-face to online outreach activity; and the compounding of pre-existing disadvantage as regards, for example, digital exclusion, educational isolation, access to health services, student poverty and (increased) caring responsibilities. While enrolment growth in absolute numbers of equity group students



in Australia has increased 12.6% between 2013 and 2018, including a reported 21.1% for low socio-economic (LSES) students and 50.0% and 42.9% for students with disabilities and Indigenous students respectively over that time (Koshy, 2019), students from disadvantaged backgrounds remain under-represented in Australian higher education and enrolment growth has been quite modest since 2016, with 2018 being the lowest growth recorded over the period (Table 3, Koshy, 2019). Access to, and participation in, higher education, the necessary precursors to retention and success, must retain high visibility on the policy agenda (Harvey et al., 2016).

But there are unique opportunities in the contemporary rendering also; disruption should drive change and innovation. If we are able to lift our gaze beyond the immediate challenges, 2020 has offered potential for significant formative, rather than iterative, step change in our (re)visioning of the possible. As leaders consider their nations' economic and social recovery and healing, one in which fairness and prosperity for all should be foregrounded, our sector's thought leadership should perhaps turn to articulating our own roadmap for strategic and integrated action to ensure that 'all people, whoever and wherever they are, are enabled to successfully engage in beneficial lifelong learning' (Zacharias & Brett, 2019, p. 7). Such a holistic, inclusive and integrated view of educational equity rightfully privileges the centrality of the learner in the 'enactment of [all] academic endeavours' (O'Shea, see Chap. 2) and allows for the accommodation of broader political, socio-cultural and very personal connotations of success and learning engagement (Zepke, see Chap. 4).

Moreover, while not at all eschewing the quantified evidence-base, but moving beyond its singular reliance on narrow, one-dimensional measures, it is possible to imagine more holistic constructs of retention and success that further the theorising and initiatives expounded in this volume. For example, the Irish National Forum (O'Farrell, 2019, p. 28) proposes far more inclusively that:

Student success optimises the learning and development opportunities for each student to recognise and fulfil their potential to contribute to, and flourish in, society.

To be achieved, this requires a culture in Irish higher education that values inclusivity, equity and meaningful engagement between students, staff, their institutions and the wider community.

This formulation speaks to many of the themes interwoven throughout this book.

Theorising more expansively still, in response to joint Industry 4.0 and COVID-19 disruption, it has been argued that the notion of learner success should span all sectors – schooling, tertiary (vocational/further and higher) education and beyond – to adapt to the modern necessity for additional learning across the working lifespan in a ‘connected lifelong learning ecosystem ... for a fairer and prosperous future’ (Kift, 2020). This notion of future-proofing the employability prospects of expert learners adds another dimension to broader success considerations. This is success over an expanded lifelong learning continuum, where there are warmer handovers, better alignment and increased permeability between currently siloed education sectors, including continuing professional development and on-the-job training in Industry 4.0 workplaces. Success in this context is facilitated by an assurance of ‘[equitable] access to employability development within higher education studies’ (Bennett, see Chap. 10) and envisages the lifelong aggregation of all learning (formal, informal and non-formal) by agentic learners (Kift, 2020): it is far more complex than graduate-level, first-job employment (Bennett, see Chap. 10).

It is for this reason that the imperative to embed career development learning in the curriculum for graduate success has gained considerable traction (Bennett, see Chap. 10), though the combined impact of funding constraints, COVID-19 and the diversity of student populations may see progress slowed. Related and important success considerations here, though beyond the scope of this work, include: the increased portability and recognition of prior learning and experience; easier credit transfer; and adequate access to opportunities for up- and re-skilling via shorter-form credentials (including micro-credentials) as workers adapt to changes in industries and job tasks (Alpha Beta, 2019). This extra learning and its aggregation, potentially in a lifelong learning account (for example, American Workforce Policy Advisory Board, 2019), accord

with Bennett's definition of employability as the ability 'to find, create and sustain meaningful work across the career lifespan and in multiple settings' (Bennett, 2019, p. i). Co-creating innovative courseware with industry and students, which explicitly connects higher education to the future workplace, is another key component of this refreshed employability success calculation. Kori and Pedaste (see Chap. 13) and Millard and Evans (see Chap. 8) provide blueprints for processes and practices in this regard.

## COVID-19's Mainstreaming of Educational Disadvantage

If there is any silver lining to the COVID-19 cloud, it is that equity considerations, and the respectful mediation of higher education disadvantage, have been largely mainstreamed. The impact of COVID-19 on universities' business-as-usual operations, and the rapid shift to online, off-campus teaching, described by some as 'panic-gogy' (Kamenetz, 2020), have seen many students newly disadvantaged. COVID-19's online disadvantage has been pervasive and frequently cumulative – academically, psychosocially, financially, health-wise, personally (due to caring, home-schooling and work commitments), and logistically (as regards, for example, digital poverty). A not-unwelcome consequence has been that attention to inclusion has rapidly become a whole system imperative, rather than a cohort specific one. The research, resources and work-arounds developed over many years for equity group students are now of near universal application as the pandemic accelerated an abrupt and global mobilisation of 'an initial phase of pedagogical triage' (Chick et al., 2020, p. 2) off a base of variable levels of institutional preparedness. How much of a catalyst these rushed pedagogical decisions will be for the longer-term, sustainable delivery of our aspirations for quality, well-designed digital learning environments remains to be seen. Critically, does institutional capability now exist to leverage available technologies holistically to scale access, retention, success and engagement for all learners?

As Stone (see Chap. 9) identifies, under-represented students in higher education have traditionally been over-represented in online study. These students are initially drawn online by its promise of flexibility and convenience regarding pace, place and delivery mode, but are frequently dismayed and discouraged by their lived reality of its disenfranchising, second-class status. While online learning has been a significant enabler for widening access and participation for increasingly heterogeneous student populations, unfortunately

... higher attrition rates in online learning have been a cause of concern for some time, indicating that the diverse cohort of students attracted to online learning needs to be better understood and supported, both within teaching and learning practices and broader support mechanisms. (Stone, see Chap. 9)

Stone's reference to 'broader support mechanisms' raises another crucial success enabler that has been languishing for some time, despite the exponential growth in online education over the last decade. We know that just-in-time, just-for-me, wrap-around student support and access to services are critical for student success from the earliest interactions (including pre- and during induction/orientation) (Kift, 2009). In the COVID-19 online environment, how such access and transition support are enabled without resort to traditional on-campus, 9 am to 5 pm week-day availability, has proven problematic. Even before COVID-19, learning support for online students was so much of an issue in Australia, that the Higher Education Standards Panel (HESP), in a 2017 review commissioned by the Australian Government of retention, completion and success, recommended that 'institutions should pay particular attention to ensuring their support services are meeting the needs of external students who are not regularly attending campus because these students are identified as at risk of not completing their studies' (HESP, 2017, p. 9, Recommendation 7). In a related recommendation, the HESP also called for every institution to develop its own retention strategy (2017, p. 9, Recommendation 5).

Every institution should have its own comprehensive student-centred retention strategy, which is regularly evaluated. These strategies could include institutional retention benchmarks and, as appropriate, processes for entry and exit interviews, the integration of data-based risk analytics and targeted support interventions, a suite of support services and a means to re-engage with students who have withdrawn.

This latter is not an isolated national response: for example, in Ireland, the *Higher Education System Performance Framework 2018–2020* requires all higher education institutions (HEIs) to have a ‘Student Success Strategy in place by 2020 which will embed whole-of-HEI approaches to institutional access strategies’ (Department of Education and Skills, 2018, p. 15).

It is noteworthy that Stone’s seven recommendations (see Chap. 9) to inform whole-of-institution action to address the needs of online students were developed initially under an Australian Equity Fellowship to improve student outcomes for disadvantaged students (Stone, 2017a). Stone’s Fellowship work provides a framework and 10 National Guidelines (Stone, 2017b) to address these issues, which have been of immediate and valuable application in the COVID-19 context (Drok, 2020). Recent research has also begun to explore the impact of unbundled, third-party provision of online study support services on the success of increasingly diverse student cohorts. Pre-COVID-19, Dollinger and colleagues (2020, Conclusion, para. 2) observed that while

... online study support services may not replace face-to-face support in the near future, online support may appeal to a certain subset of students, for example those studying in remote locations, or those who have employment or family commitments that make traveling to campus during business hours difficult.

In 2020, this ‘certain subset of students’ is now *all* students, and the researchers’ conclusion that ‘online study support services are useful to students and may serve an important [role in] providing flexible study options for all students, regardless of campus location and study load’

(Dollinger et al., 2020, Conclusion, para. 1) offers a quality assured way forward for equitable delivery of 24/7 support for student success.

There is reason for hope that this long-awaited attention to off-campus support and service provision, in newly personalised ways, will endure. Rigorous evidence-based evaluation of what worked (and did not) across the pedagogical triage of teaching, learning, support and services should be an urgent piece of institutional business as staggered on-campus activity resumes. No institutional touchpoint can be exempt: student administration; policy interactions; counselling services; equity support, including disability services; language and academic skills areas; student communications; calls on IT help desks and infrastructure; and, of course, all aspects of the move to remote learning, teaching and assessment. Emerging initiatives, such as the curation of Open Education Resources (OER), particularly open-access textbooks, in response to students' dire financial circumstances, will hopefully be upscaled (Lambert, 2020a). Broader issues regarding the efficacy of institution-student relationships in the pandemic, particularly as regards assuring belonging, sociability, community and teacher presence, and including the support for, and measurement of, engagement, will also benefit from robust examination.

In this latter regard, it is observed that another welcome enhancement emerging from under the COVID-19 cloud has been a re-balancing of the relationship between institution and student for more compassionate and equitable outcomes. Both students and staff have struggled with the abrupt shift to online learning and teaching respectively, while everyone had to adapt to studying/working from home. Assumptions about the needs of 'typical' students, historically underpinned by notions of equality (not equity), which led to inflexible policies and practices that undermined success for disenfranchised students, have been re-evaluated for pandemic fairness. The general response has been to significantly relax previously strict policy provisions to accommodate the challenges of students' complicated and anxious lives in uncontrollable circumstances. Examples abound and include: altering admission timelines; assessment, grading and timing accommodations (for example, for special consideration, extensions, deferrals, requests for reasonable adjustments); granting course withdrawals and leaves of absence; the recording of failing

grades; generous financial support policies; and modifications to secondary students' entry pathways and admission criteria for the new academic year (for example, Lambert, 2020b). In the midst of the pandemic, the UK Quality Assurance Agency (QAA), published a suite of relevant resources on its website, including advice on “No Detriment” Policies’ and safety net measures to allow students to be ‘free to focus on their learning and realising their academic ambitions rather than worrying about risks to their academic outcomes due to matters that are beyond their control’ (QAA, 2020, p. 1). Advocates for disadvantaged students have long argued that learners’ complicated life circumstances should legitimately be taken into account for grading, assessment and broader purposes, but to no avail. There is cause for optimism now that the impact on retention and success of significant life events (such as, for example, a pandemic, loss of employment, moving house, domestic violence, natural disasters, and caring for family members with health issues), which disproportionately affect people from marginalised backgrounds, might be treated with greater compassion, humanity and consideration.

## **Whole-of-Institution Approaches and Partnerships**

Another big win for retention and success out of COVID-19 has been the agility of whole-of-institution cooperation between academic and professional staff to pivot to new learning, teaching and support delivery modes. Significant enhancements have been made in the cross-institutional coordination of, and collaboration for, integrated pandemic responses, with levels of mutual trust and respect, it might be observed, that have been hitherto absent. While the pace and intensity may not have allowed for as much student co-design as desirable (see below), big institutional ships did turn around quite quickly, enabled by an unprecedented assumption of individual and collective responsibility for collaborative outcomes, delivered with a growth mindset and compassionate acceptance of (inevitable) imperfection. Institutional joint efforts were

further supported by a global coalition of experts and organisations who shared established and developing good practice. Examples include:

- Technology Enhanced Learning (TEL) advisors worked with academics to turnaround digital learning resources and curated content in new synchronous and asynchronous formats. They also liaised with equity and accessibility teams to assure the delivery of learning environments with maximum inclusiveness.
- IT departments coordinated whole-of-institution acquisition and roll-out of newly acquired or modified platforms for rapid uptake (such as Zoom, Microsoft Teams, Microsoft Suite podcasts, Google apps for education, remote proctoring software and chat bots), some even beyond the great firewall of China. They also worked with business owners to manage and assure: data privacy, its collection and storage; cyber security; analytics applications for virtual classrooms and environments; and the broader digital experience.
- Academic developers worked with TEL advisors to produce quick 'how-to' learning design guides for resource and courseware development and to build skills and capability that academics have claimed never to have had the time nor support to develop previously (Langer-Crame et al., 2019).
- Sector-wide collaboration enabled significant assessment redesign. Particularly, there was a global movement to rapidly reframe assessment away from invigilated closed book exams (for example, Deneen, 2020; Jisc, 2020; Sambell & Brown, 2020). The contemporary focus on academic integrity and contract cheating was also turbocharged (see, for example, the Australian Tertiary Education Quality and Standards Agency (TEQSA) website curation of assessment integrity resources during COVID-19 <https://www.teqsa.gov.au/assessment-integrity>).
- In many institutions, professional staff (librarians, language and learning advisors, educational designers and others already mentioned here) developed key resources for students to support their move online (for example, time management strategies, assignment calculators, digital literacy support and tips for effective online learning engagement). Students also exercised agency and developed advice and resources for



both their peers and staff (for example, Graduate students in IS590EL, 2020; UTS Student Hacks podcast <https://www.uts.edu.au/current-students/support/student-learning-hub/news>). Bishop's University in the United States hired 23 university students in mid-2020 as 'Online Learning and Technology Consultants' to help support academics prepare for Fall 2020 (<https://www.jessicariddell.com/about>).

- Student communications professionals worked hard to coordinate 'single-point-of-truth' web-based hubs and other pandemic messaging for consistency and coherence to mediate information flow, for support provision and to manage expectations in segmented ways that we have struggled to accomplish coherently at scale beforehand.
- Critical student support services rapidly transformed their service delivery to off-campus, online environments in areas such as student well-being, online mentoring, learning support, equity group accommodations and the day-to-day crisis management of coping with change.
- Policy guardians anticipated inevitable requests for policy relaxations in the various ways described above.

These new and productive ways of working collaboratively in cross-university solidarity will hopefully have become enmeshed in organisational DNA and be the catalyst for institutional transformation of the 'evolving network of policy, structural processes and human factors [that] collectively [work] towards improving student retention and enhancing student success' (Manik & Ramrathan, see Chap. 6). They have delivered a quantum leap in the development of vital institutional capability and underscore the efficacy of such approaches. As Curran (see Chap. 7) astutely observes, whole-of-institution approaches for student success are both strategy *and* culture characteristics of 'effective practice across the discipline areas ... [which include]:

- building of trust relationships between staff and student and student-student
- engagement through partnership
- building of communities of practice which incorporate on-going formative feedback.'

Such a pervasive and values-based embrace of a student success culture ensures that our institutions are ‘ready for the students’ they recruit, rather than expecting to attract ‘university-ready students’ (Millard & Evans, see Chap. 8). Its transformative approach (Thomas, see Chap. 3) and embedded philosophy encourage and enable the work described by Shepard, Rehrey and Groth (see Chap. 5) for the development of a Learning Analytics Fellows Program. Particularly, it respects partnerships with students and student voice (Millard & Evans, see Chap. 8), and informs our understandings of success through the lived experience of student narratives (O’Shea, see Chap. 2). The ‘evolution in institutional policy, practice and values as the curriculum and support services [become] better aligned to reflect the “real lives” of students’ (Millard & Evans, see Chap. 8), underpins much of the contemporary student engagement and success effort, quite obviously because it provides a ‘deeper and interconnected understanding’ of retention and success concepts in actionable detail (O’Shea, see Chap. 2). The recent theorising behind ‘Partnership Pedagogy’ (Barrie & Pizzica, 2019), building on a rich body of international work, holds great promise for enduring retention and success gains.

## Mental Health and Wellbeing

Though not the subject of extensive consideration in this book, no treatment of retention and success in the 2020s would be complete without canvassing the intractable issue of mental health and well-being. The pandemic pivot to online delivery has highlighted the critical role that a relational philosophy of care plays in supporting student success. An ethos of critical compassion, empathy and responsiveness has long been practised in enabling preparatory and pathway education, with attendant benefits for student development of self-regulation and self-efficacy (Crawford et al., 2019). These humane educational conditions are necessary, but potentially not sufficient, in the broader COVID-19 context, given escalating concern about student (and staff) mental health and well-being.

Universities UK have defined ‘mental health’ as ‘a spectrum of experience, from good mental health to mental illness and distress’ and ‘well-being’ to include the ‘wider physical, social and economic experience’ (Universities UK, 2020a, p. 8). As societies work their way through the pandemic’s many ramifications, there are warnings that the ‘long term mental health impact of covid-19 must not be ignored’ (Bartone et al., 2020; Kousoulis et al., 2020). In higher education, COVID-19’s impact on mental health and well-being will compound success and retention issues for existing high numbers of students who experience poor mental health. Early research (Grubic et al., 2020, p. 1) has already identified that the shift to the

... emergency online learning format, ... would be expected to further exacerbate academic stressors for students ... [who] may experience reduced motivation toward studies, increased pressures to learn independently, abandonment of daily routines, and potentially higher rates of dropout as direct consequences of these measures.

This ‘unprecedented mental health burden on students’ (Grubic et al., 2020, p. 1) impacts learners who are already a “‘very high risk population” for psychological distress and mental disorders, [while] ... the prevalence and severity of mental health difficulties is growing across student populations’ (Baik et al., 2016, p. 1). For example, in Australia, Orygen, The National Centre of Excellence in Youth Mental Health, has found (2017, p. 6) that at least one in four university students experience mental ill-health in any one year and that:

Students with an experience of mental ill-health have been shown to be more likely to consider exiting, or exit, their course early. This can have a detrimental impact on both their future mental health as well as their education and employment pathways.

Indeed, the category of ‘health or stress’ has been the top ranking reason for several years for undergraduate students in Australia to consider early departure from university: in 2019, 46% of students considered departure for this reason; in 2018, 45% did so (Social Research Centre,

2020, p. 20). Worryingly, Orygen (2017) also found that students from disadvantaged backgrounds are particularly at risk of mental health conditions due to the compounding risk factors for these students.

Staff are also at risk. In the UK, Morrish (2019, p. 9) analysed data obtained under Freedom of Information requests of HEIs in the UK. She found:

- Evidence of an escalation of poor mental health among university staff in the period 2009 to 2016, based on data obtained from 59 HEIs on referrals to counselling and occupational health services.
- That referral increases of 50% were common, with some universities experiencing much higher rises: in counselling, up to 316% (University of Warwick) and in occupational health up to 424% (University of Kent) and 344% (Keele University).

When updating these data in April 2020, Morrish and Priaulx (2020, p. 1) found that ‘analysis of 17 universities reveals a continued rise in staff access to counselling and occupational health referrals’. While staff are not strictly the focus of this work, it has been observed that ‘responding to student mental health problems has a substantive, negative impact on the wellbeing of academics’ (Hughes et al., 2018, p. 9) and that ‘responding to student mental health problems now appears to be an inevitable part of the role of an academic’ (Hughes et al., 2018, p. 5). As for students, it is likely that the mental health implications of COVID-19 for university staff, both academic and professional, will lead to heightened prevalence of mental health symptomatology, given the general public increases alone (Grubic et al., 2020), together with the pressures and loss of self-efficacy created by increased workloads and the design and delivery of emergency ‘panic-gogy’ (Kamenetz, 2020).

In Australia, the Higher Education Standards Framework (2021), against which all HEIs are regulated, specifically requires that adequate support for student mental health and well-being is provided (Wellbeing and Safety: Standard 2.3.3<sup>1</sup>) and that the governing body must ‘develop

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<sup>1</sup>Standard 2.3.3: ‘The nature and extent of support services that are available for students are informed by the needs of student cohorts, including mental health, disability and wellbeing needs.’

and maintain an institutional environment in which ... the wellbeing of students and staff is fostered' (Corporate Governance: Standard 6.1.4). In 2017, the HESP recommended that 'every institution should have an institution-wide mental health strategy and implementation plan' (HESP, 2017, p. 9, Recommendation 8). With funding support provided by the Australian government, Orygen was subsequently commissioned to consult upon and develop evidence-based guidance for universities. In late 2020, Orygen released the 'Australian University Mental Health Framework' (Orygen, 2020), supported by a range of materials including case studies highlighting examples of current good practice.

In the face of COVID-19's exacerbation of existing mental health concerns, we are also able to draw upon some other excellent international research and resources to help us ameliorate this debilitating retention and success encumbrance. In particular, the UK student mental health charity, Student Minds, led an 18 month, sector-wide consultation process with thousands of students and staff to produce *The University Mental Health Charter* (Hughes & Spanner, 2019 – the 'Student Minds Charter'). This work sits alongside Universities UK's development of a strategic framework launched in 2017 – *Stepchange: mentally healthy universities* – for a whole-of-institution approach to position mental health as fundamental to core mission and foundational to university life for students and staff (Universities UK, 2020a, p. 12, citing 2035 Vision, Children and Young People's Mental Health Coalition):

Leaders of schools, colleges, universities and community organisations [should] take a whole organisation approach to the mental health of their students, young people and staff, so that it permeates every aspect of their work and is embedded across all policies, cultures, curricula and practice.

In its 2020 iteration, the *Stepchange* framework builds on the Student Minds Charter, while an open-access self-assessment tool (Universities UK, 2020b) also maps onto the Charter and includes specific reference to learning, teaching and assessment. Completing the UK package of initiatives, *The Wellbeing Thesis* is another rich website resource, hosted by Student Minds, that provides resources to support and improve the mental health of postgraduate research students (<https://thewellbeingthesis>.

[org.uk/](http://org.uk/)). Collectively, this impressive collaboration and alignment for a shared framework for change sets the international benchmark for sector-wide best practice.

In Australia, curriculum embedded responses have been a strong focus. Baik and Colleagues' seminal report, *Stimulating curriculum and teaching innovations to support the mental wellbeing of university students* (Baik et al., 2017), developed a holistic framework for a whole-of-university approach, organised around five action areas: fostering engaging curricula and learning experiences; cultivating supportive social, physical and digital environments; strengthening community awareness and actions; developing students' mental health knowledge and self-regulatory skills; and ensuring access to effective services (Baik et al., 2016). An accompanying website provides a wealth of resources for discipline embedding in curricula (<http://unistudentwellbeing.edu.au/>), including identification of five 'wellbeing essentials' (<http://unistudentwellbeing.edu.au/student-wellbeing/wellbeing-essentials/>). Baik et al. found that academics can enhance student learning and mental well-being by employing techniques that foster the well-being essentials through enhancing autonomous motivation (doing things that are intrinsically interesting, satisfying or facilitate valued goals). Autonomous motivation is improved by curricula that afford experiences of belonging, positive relationships, autonomy and competence (Baik et al., 2016).

With the abrupt scaling on online delivery, digital well-being has also become a priority. Jisc now incorporates digital well-being as an element in its digital capabilities framework (<https://digitalcapability.jisc.ac.uk/what-is-digital-capability/>) and defines it as 'the impact of technologies and digital services on people's mental, physical, social and emotional health. It is a complex concept that can be viewed from a variety of perspectives and across different contexts and situations' (Jisc, 2019a, p. 2). Jisc has produced resources to support the digital well-being of staff and students: one for practitioners, with guidance and good practice principles (Jisc, 2019a), and another for senior leaders that articulates key issues and responsibilities and eight good practice principles for organisations (Jisc, 2019b).

It is noteworthy that underpinning all of these mental health initiatives is the efficacy (again) of whole-of-university approaches. In fact, the

Student Minds Charter goes so far as to define ‘whole-university approach’ in this context as (Hughes & Spanner, 2019, p. 10):

... not only providing well-resourced mental health services and interventions, but taking a multi-stranded approach which recognises that all aspects of university life can support and promote mental health and well-being. Evidence suggests that whole university approaches appear to be more effective than individual interventions.

## Inclusive Curriculum Design

Assuring the quality and inclusiveness of curriculum design, regardless of delivery mode, is key to operationalising many of the recurrent themes in this book; especially curriculum that embeds contextualised support equitably for all students. In postcolonial South African, and in Aotearoa/New Zealand and Australian contexts, design should also attend to advancing reconciliation with First Nations Peoples and to decolonising curriculum that has historically been ‘Eurocentric in nature and [where] colonial epistemologies were foregrounded’ (Manik & Ramrathan, see Chap. 6; Universities Australia, 2019). It would be fair to say that inclusive curriculum design to intentionally support retention and success remains a work in progress, though significant advances have been made over the past decade (Bovill & Woolmer, 2019; Kift, 2015; McCluskey et al., see Chap. 12; Thomas, 2012; Thomas, see Chap. 3; Zepke, see Chap. 4).

In 2020, the Australian higher education regulator, TEQSA, released a Good Practice Note on improving retention (TEQSA, 2020). Included amongst the nine good practice themes identified were:

- design of the curriculum
- the importance of early identification of students at risk of discontinuing their studies
- course and career advice
- academic student learning support
- a sense of connectedness to the institution at which they are studying

- the catering for different student backgrounds.

Each of these themes, when enabled intentionally and holistically through inclusive curriculum design, assures relevance, accessibility and engagement, underpinned by scaffolded support for academic skills development and competence, thus laying the foundations for success. Consequently, students see value in investing in their learning, while their academic well-being is enhanced. McCluskey et al. (see Chap. 12) observe that

... the intentional scaffolding of knowledge and skills acquisition, inclusive approaches, clarity of learning outcomes, development of assessment literacy, authentic, engaging assessment tasks, work-integrated learning, options for the development of twenty-first century skills, embedded active and collaborative engagement and flexible delivery are all essential aspects of achieving positive learning outcomes.

Each of these loci for success is discussed in the McCluskey et al. chapter and further expanded upon in this book.

Intentional, inclusive learning design, which harnesses curriculum as the ‘social and academic organising device’ for holistic – whole-of-student – student success is central to Kift’s Transition Pedagogy (2009, p. 1; 2015). As Zepke (see Chap. 4) explains in the context of his discussion of Transition Pedagogy:

... engagement in the curriculum is key to creating the conditions for learning success. It is within the first-year curriculum that commencing students must be engaged and supported to realise success such as persistence, positive learning relationships, respect, trust, connectedness and feelings of belonging.

Thomas (2012, p. 15) has similarly concluded that ‘the What Works? projects have found that effective interventions are situated in the academic sphere’. It is within the academic sphere – the curriculum broadly framed – where autonomous motivation, self-belief, agency and



competence are developed and where connections to active citizenship for engagement and life-wide experiences are made (Zepke, see Chap. 4).

There are many established frameworks, theories and pedagogies that support inclusive curriculum design for retention and success. The best known is Universal Design for Learning (UDL), which seeks to improve education's inclusivity by accommodating a range of abilities and backgrounds in the design process, via multiple forms of representation, expression and engagement (CAST, 2018; Thomas, see Chap. 3). More recently, students and staff have responded positively to the potential of a UDL assessment approach (Morris et al., 2019). In Australia, RMIT University's *Inclusive Teaching and Assessment Practices Project* (Harley & Nomikoudis, 2014) is underpinned by UDL concepts and Student-Centred Learning, while drawing also on other pedagogies and strategies (for example, Griffiths, 2010; Hockings, 2010; Kift et al., 2010; Morgan & Houghton, 2011).

Three specific aspects of inclusive curriculum design for retention and success have received specific attention in the pandemic context, each of which has a chapter in this book: assessment and feedback; learning analytics; and student as partners. These will now be briefly discussed.

## Assessment and Feedback

Day, Admiraal and Saab (see Chap. 11) position assessment and feedback as crucial to effective learning and vital to retention and success. Few would disagree. For many students, assessment fundamentally defines the curriculum; their experience of it determines learning engagement and success. For discipline academics, assessment practice is complex and deeply contextual. But 'done properly, it drives improvement, shapes learner behaviour and provides accountability to employers and others' (Jisc, 2020, p. 6). In higher education, we now speak knowingly about assessment 'for', 'as' and 'of' learning but, for many students, the course assessment strategy is frequently the muddiest point of their learning engagement, if not also perceived by them to be frequently unfair and inequitable.

In the initial phase of COVID-19's 'pedagogical triage' (Chick et al., 2020), assessment and assessment integrity were particular foci of attention. In the move online, assessment values, attitudes and assumptions were thrown into stark, and often unflattering, relief. We have referenced above some of the sectoral resources produced by an international collaborative effort to support this complex step change in practice. Again, COVID-19 has accelerated the future; here, the future of assessment design.

Pre-lockdown, Jisc (2020) had helpfully posited digital technology as enabling assessment to meet five key goals; those of enhancing authenticity, accessibility, automation, continuity and security. Inevitably, pandemic-induced assessment responses will have led to challenges and trade-offs. The sheer complexity of rapidly scaling online assessments will not have been without missteps. Particularly, assessment inequity may well have been exacerbated, especially for novice and underprepared learners and for those facing fresh external pressures. Nevertheless, with disruption comes opportunity. Remote teaching and learning has prompted academics to revisit assessment design, much of which pre-COVID was deployed on-campus and in class. The online pivot has led to an embrace of greater flexibility and diversity in assessment practice for online completion. For example, pre-pandemic the predominant end-of-course summative assessment was invariably the high-stakes, high-stress, handwritten, invigilated examination. Over COVID, course assessment strategies focused on examinations were completely recast over several short weeks. Will the crisis trigger an enduring reset from past moribund practice to the long-heralded embrace of authentic and adaptable assessment? We do not underestimate at all the complexity of the assessment ecosystem that needs to be corralled for this to be sustained – across disciplinary norms, accreditation requirements, technological affordances, policy, educational design, institutional culture, employers, academics and students. But surely we can be cautiously optimistic that some permanent shift towards assessment reform and renewal might survive post-pandemic?

Assessment renewal, if not transformation, is sorely needed. At the disciplinary level, where the assessment rubber hits the retention road, it hardly needs to be said that student experience of assessment is highly

consequential. But recent research in Australia has found that even the first assessment impacts retention and success (Walker-Gibbs et al., 2019, p. 37):

First year students use first experiences of assessment to calibrate their expectations, their performance and their own suitability for higher education. Their sense of belonging in the higher education institution – in particular after some form of ‘gap time’ between formal schooling and university – is linked to the experience of success. Student’s disposition – conditioning around how individuals think about success and failure and themselves as learners – and potentially institutional conditioning is connected to the experience of success and failure in the result in their first assignment.

These researchers suggested that, in this regard, a more nuanced understanding of belonging is required and they recommended consideration be given to the

... potential disconnect between the student and the academic [which] has implications for understanding the academic requirements of the course, but also the mutual recognition of what the student needs to achieve success and gain a sense of belonging in higher education. (Walker-Gibbs et al., 2019, p. 40)

McCluskey et al. (see Chap. 12) state that the ‘development of assessment literacy [and] authentic, engaging assessment tasks’ are crucial. Relatedly, Walker-Gibbs et al. (2019) identified that building learners’ feedback literacy into early assessment experiences is important in order ‘to engage students with assessment expectations, standards and criteria beyond mere provision of a rubric’ (2019, p. 41). There are clear success gains in assessment and feedback practice to be leveraged and COVID-19 may well be the catalyst for their longer-term adoption.

## Learning Analytics (and Beyond)

Shepard et al. (see Chap. 5) have highlighted the role that learning analytical tools can play in improving performance and success over the student lifecycle in data intelligent institutions. When data-driven leadership enables the use of evidence and criticality to inform institutional change across the full scope of the student success remit – administration, advising and degree planning, early alerts for proactive success interventions, degree tracking, uptake of support services, and in teaching, learning and assessment – learners are supported to achieve their academic goals more economically and confidently. The COVID-19 move online forced an intense focus on student success data management and governance, and on the promise of student success technologies to ‘help ameliorate students’ academic and even personal concerns and the ways in which these systems and data [might] be improved to better help students and those who support them’ (Graje & Brooks, 2020). Shepard et al. (Chap. 5) particularly emphasise the critical role of academics and the curriculum in this data-driven work, at both the macro-and micro-levels (the institutional and student levels) of the student success ecosystem.

Over the past decade, the use of learning analytics and educational data mining, to enable disparate sources of university data to be transformed into actionable knowledge for iterative quality enhancement, has been the subject of increasingly sophisticated examination and application internationally. In higher education, big data, evidence and analytics have been utilised variously for: student retention uplift and better graduate outcomes; evaluation of educational quality; the development of models for personalised and adaptive learning; and student tracking and reflection on their own progress. For example, academic staff have been encouraged to engage with easily accessible learning analytics data through the learning management system and to use these real time data to identify and support students who may be at risk of failing or not engaging early in the teaching period. While experts remain positive about the potential of learning analytics to improve student learning, it is acknowledged that significant challenges persist around how student data are used, interpreted and presented to both students (who generate these

data) and staff. The major technical and broader ‘social, political and pedagogical issues to be tackled’ led Ferguson and colleagues (2019, p. 57) to identify seven factors that ‘will have to be taken into account when implementing learning analytics during the coming decade: pedagogy, complexity, ethics, power, regulation, validity, and affect’.

The ‘widespread unease about how analytics may develop’ (Ferguson et al., 2019, p. 43), escalates as the field moves further into the domain of AI and data-driven machine learning (ML) tools and services. Particular issues here include the potential for discriminatory outcomes for student equity and success by reason of bias repetition and amplification, for example, in applications such as: e-marketing; predictive risk modelling; automated plagiarism detection; and automated advising and recommender systems for course selection. To realise the potential gains for student success in these fields, there is a critical need for continued vigilance, thought leadership, research and policy work to develop principled frameworks that adequately protect and advance student equity in the age of AI and ML and guide this next wave of success mediation. At the time of writing, some deep thinking is emerging around assurance of actionable, unbiased and equitable datasets to realise the potential of AI and ML for all, including marginalised populations (for example, <https://lacunafund.org/>).

## Students as Partners

As Curran (see Chap. 7) exhorts ‘a culture of team working and an ethos of “students as partners” should be further embedded across all discipline areas and include all staff and students’. Millard and Evans (see Chap. 8, citing Healey et al., 2014, p. 7) remind us that a partnership ethos is ‘essentially a process of engagement, not a product ... a way of doing things, rather than an outcome in itself’. We earlier expressed the hope that COVID-19’s quantum leap in whole-of-institution solidarity is sustained. Desirably also, such a step change should enable upscaling of all aspects of Partnership Pedagogy (Barrie & Pizzica, 2019) and collaborative enterprise, enhanced by newfound respect, trust, reciprocity and positivity. While it seems to have been the case that many pandemic

decisions that profoundly affected students, including changed assessment practices and remote proctoring, were made at speed and without widespread student consultation (Schwartz & Pisacreta, 2020), there is every reason to expect that, moving into the next phase of crisis review and future planning, previously well-established decision-making processes that engaged with student voices will resume. As we look for better success outcomes, it will be important

... to plan ahead for incorporating student voice into both rapid and expected decisions moving forward. Learn from the challenges that students have faced and incorporate those insights into future decision-making. Seek feedback from students now for decisions you expect in the future. (Schwartz & Pisacreta, 2020, Plan ahead and course correct, para. 1)

Reflection on the pedagogical lessons of the pandemic in a partnership process with our students presents a singular opportunity for the sector to re-examine and reset long espoused beliefs and practices across the breadth of the student experience, and particularly as regards what works for, and has potential to influence more inclusively, success in the digital environment. This is important student engagement and active citizenship work for sustainable success uplift. For example, similarly to the *Student Engagement Framework for Scotland* (sparqs, 2011), Zepke (see Chap. 4) frames student engagement with their own learning as key in retention and success, regardless of whether it occurs

... in a classroom [or] as a life-wide experience ... For example, developing student relationships with learning, fostering students as partners in the curriculum and valuing critique and active citizenship add life-wide and life-long dimensions to engagement that can include or exclude neoliberal influence.

Such engagement should guide post-pandemic reflective critique, particularly (if not pursued pre-pandemic) to build productive student-staff partnerships for the co-design of digital environments (Killen & Chatterton, 2015). Participative self-evaluation of the deployment of emergency remote teaching, learning and support that is inclusive of all

actors (students and their representatives, senior leaders, academics, professional services and support staff, and the broader community of government, industry and professions) should also open up the possibilities for greater co-creation activity; including what Bovill and Woolmer (2019, p. 409) refer to as both ‘co-creation *of* the curriculum (co-design of a programme or course, usually *before* the programme or course takes place) and co-creation *in* the curriculum (co-design of learning and teaching within a course or programme usually *during* the course or programme)’. Certainly, students’ active participation in all pandemic review aspects – institutional responses, governance, decision-making, administration, support provision, and teaching, learning and assessment practices – will be fundamental for shared ownership and trust beyond the immediacy of the COVID-19 crisis.

## Conclusion

The COVID-19 crisis has been a salutary stress test of our retention and success ecosystems. In the sector’s extremis, some educational enablers have shone, in particular: the visibility of critical care and compassion for each other, the capacity for mutual trust and respect in our interactions, and our capability for global and whole-of-institution collaboration across academic and professional silos. There have also been some lapses; the rapid response not allowing for deep partnership engagement with impacted students being a particular disappointment. On balance, however, it seems fair to say that the sector has embraced a growth mindset and harnessed a strengths-based success focus. Specifically, our pedagogical interactions have been rapidly reconfigured absent problematising or deficit framing, but with focused diligence and resilience. It has been refreshing.

The challenge now is to engage in critical dialogue to learn the lessons of the pandemic for retention and success and to imbue our reimagined constructs with greater nuancing for individuals’ lived, unique and fluid realities. This book provides a firm foundation on which to base that dialogic reflection. The opportunity cost of wasting the best of our pedagogical and support triage, and not entrenching fundamental shifts where

learners and their success are positioned at the centre of our better normal, is too great. The quality core of an engaging, inclusive and relevant educational experience, one that fosters authentic relationships between learners, their institutions, the world of work and the broader community in a relational model of learning success, is foundational to delivering on our educational promise. As Harvey and Colleagues (2017, p. 7) argue, our sector should reflect in its definitions, metrics, language and course design the reality of learner engagement, particularly for those who move in and out of tertiary study.

Language, metrics and incentives need to adapt to reflect the growing realities of non-linear student pathways, diverse student cohorts, and increasingly partial, part-time, deferred and liminal enrolment status. Prudent universities will view withdrawal from university neither as a symptom of failure nor as a final student decision.

It is difficult to (re)conceptualise retention and success without engagement. We know that meaningful engagement between institutions and students is a crucial success enabler (Millard & Evans, see Chap. 8; Zepke, see Chap. 4). Zepke's use of 'active citizenship' (see Chap. 4) to acknowledge education's effects as life-wide and participatory advances our thinking, while the editors recognise the necessity for lifelong learning to become a practical reality for all (Kift, 2020). In the wake of COVID-19's acceleration of Industry 4.0 workforce trends, the recognition that success, as perceived by many students, includes a key component of employability (Bennett, see Chap. 10; National Forum for the Enhancement of Teaching and Learning in Higher Education, 2019), requires that we make explicit the connections between course learning and the development of skills to maximise employability and citizenship outcomes for heterogeneous and unpredictable futures.

The impact of COVID-19 on students has been complex and, at the time of writing, still nascent. We can say that COVID-19 has led a majority of students in 2020 into circumstances of disadvantage – academically, logistically, financially, geographically and psychosocially. The pandemic has also exacerbated disadvantage for many students already in its thrall, across all education sectors and at all levels in higher



education – undergraduate, postgraduate and higher degree research. For example, an April 2020 survey of 1076 research students in Australia reported that 75% were experiencing financial hardship, of whom 45% expected to be ‘forced to disengage from research within the next six months’, a number potentially never to return (Johnson et al., 2020, Results, para. 5). Inequality and inequity have been something of a through-line in the student experience of learning in the pandemic. As a result, educational success has been reduced for many students. We need to focus, all over again, on the ‘the broad nature of higher education engagement’, which Naylor et al. (2016, p. 264) suggest should include ‘several non-exclusive thresholds of increasing success’, still focused on the academic sphere, but with due recognition accorded to the lived experience of individualised success. Redolent of the themes in this book, Naylor et al. (2016, p. 264) suggest thresholds around: admission (awareness, access); engagement (subject completion, quality learning outcomes, quality student experience); completion (timely qualification, broader capabilities, work readiness); and postgraduation (employment outcomes, further study, societal outcomes).

Quite fundamentally, we hope that our sector will emerge from this health, economic, social and educational crisis with greater empathy for, and understanding of, the stultifying effect of disadvantage on retention and success. Assurance of a universal commitment to an ethos of inclusive curriculum, policies, practices, resources and supports is required to respect and value the reality of individuals’ differentiated experiences of learning and their embodied understandings of success, which rely ‘on personal desires and perceptions’ (O’Shea, see Chap. 2). As raised frequently in this work, we must eschew the positioning of students as being largely responsible for their own academic success and rather ‘adapt [our] administrative and academic cultures to meet the diverse interests of [our] students’ (Zepke et al., 2005, p. 5).

The key takeaway from this mature, global collection of retention and success wisdom is that the international effort directed at resolving the wicked problems of ‘retention’ and ‘success’, in all their nuanced glory, will forever require our sustained focus; this difficult pleasure will never be a completed scope of work. The price for our assurance of student success will be our eternal vigilance in its iterative discharge; it can never be

left to chance. The editors and authors of this work are deeply committed to social justice and inclusion, and to the social cohesion, national health, well-being and prosperity that flow from such a stance. Looking forward to a post-pandemic world, it seems not hyperbolic to suggest that educational success writ large must feature prominently in any holistic response to the existential threats to which 2020 has given such concrete expression. Particularly, educational success (and retention's role in it) will be essential to societal healing in the post-pandemic renewal phase, especially for our young people who have borne a disproportionate share of the economic and social pain. This is a challenge many in our sector are ready, willing and able to meet, building on the patient capital of decades of good work. The positivity and commitment expressed in this book shine a light on what's possible and, if guided by a philosophy of care, no learner will be left behind in our relentless focus on success's future rendering.

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