

Chapter 13

The Dutch Vocational Education System: Institutional Focus and Transformations

Stephen Billett

13.1 The Dutch Vocational Education System: Factors and Purposes

To the outsider, the Dutch vocational education system is striking because of its breadth, complexity and strong institutional emphases. It is difficult to unpick and fathom, not the least because of the long list of acronyms used to describe its current form and the institutions that sit behind these. Not that this system is alone in presenting such difficulties to the outsider. Yet, comprehending this education system and to make comparisons and judgements about it, necessitates understanding something of the complex of factors that shape its particular purposes, forms and structures. It would be wrong, however, to suggest that such an exploration is required only of the Dutch vocational education system. When referring to the origins and form of European vocational education systems, it is necessary to identify and understand the range of factors that have led to their particular forms and diverse characteristics (Hanf, 2002). Having delineated these factors, it is helpful to use them to highlight what is specific and distinct about its institutions, forms and practices, and the relations amongst between them. From such a standpoint, it may be possible to appraise the efficacy of the waves of reforms that have impacted the system in the last 20 years and those likely to arise in the future. Also, an analysis of such factors permits insights into factors that might be common across these systems globally or that make them distinct.

In canvassing and exercising these possibilities, this chapter commences by offering and justifying a framework comprising three sets of factors that are used to delineate the particular institutions, forms and practices of vocational education

S. Billett (✉)

School of Education and Professional Studies, Griffith University, Brisbane, QLD, Australia
e-mail: s.billett@griffith.edu.au

systems per se. Following the elaboration of this framework, the application of these factors to the Dutch vocational education system is then exercised to illuminate and explore its distinctive qualities and characteristics. Drawing largely on the contributions from this volume, these qualities are discussed in terms of the contemporary provision of the Dutch vocational education system. Overall, it is held that in responding to actual or perceived social and economic crises, the negotiations amongst central agencies (i.e. governments and social partners - unions and organisations of employers) and local institutions and communities have come to shape the particular purposes and forms of the Dutch vocational education system. Social partners have been and continue to be very important in shaping this system. However, it would be naïve to believe there are always close alignments or consonant interests amongst national governmental imperatives and their social partners and those exercised locally, such as the needs of particular companies. These misalignments lead to a dynamic system that is subject to on-going explicit negotiations and engagements with and even resistance to the range of interests and concerns expressed at both national and regional levels. Whilst these are analogous to what occurs in other countries they play out in country-specific ways. This case is made across the following sections.

13.2 A Framework for Elaborating Vocational Education Systems

Rather than merely comparing one vocational education system with another, it is helpful to have a means to understand each of these systems on their own bases and premises. Such a means is important not only for the purposes of informed and balanced comparisons, but also to ensure that an understanding of these systems is not premised upon ill-conceived and erroneous bases. For instance, in the English-speaking world, the word “school” has a particular connotation associated with what is usually referred to as primary school and secondary or high school for children. In English-speaking countries, however, the educational institutions that support young people’s entry into work life and specific occupations tend not to use the word “school” (with some exceptions); for instance, vocational education colleges, senior colleges, community colleges, or vocational education institutions. Hence, when an English speaking audience see the words school, scholen or hogescholen they often erroneously view these as being those institutions in which children complete their compulsory education within which vocational education programs may be embedded. Yet, these words connote quite different institutions in a non-English-speaking context, such as Germany, the Netherlands, Austria, Sweden, Switzerland and, of course, the Nordic countries. Therefore, not only is it necessary to set out the historical development and societal factors that shape these national systems, but also to clarify the meaning of key concepts and words so they can be properly understood and appraised. Such an approach seems more informed than seeking to compare and appraise without such understandings.

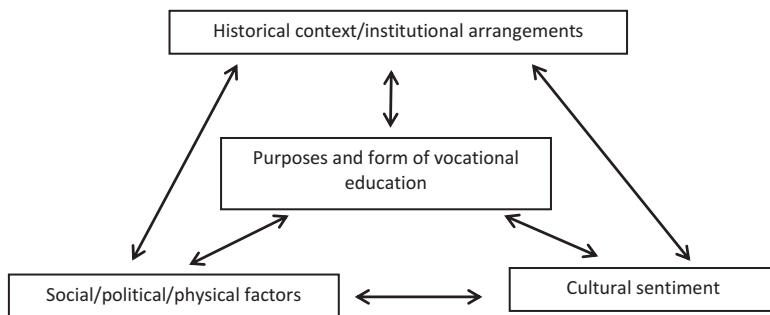


Fig. 13.1 Factors shaping the purposes and form of vocational education

It follows that when seeking to understand a particular vocational education system or make it accessible to audiences from other countries, let alone compare it with other systems, it is helpful to offer a framework to assist the presentation of that system. The following set of factors were identified through an earlier consideration of the purposes, traditions and forms of vocational education (Billett, 2011) as a means to describe and delineate these systems. As depicted in Fig. 13.1, these sets of factors are threefold: (i) historical/institutional arrangements, (ii) social/political/physical factors, and (iii) cultural sentiments. While each of these sets of factors could be divided and elaborated further, they offer bases to inform the (iv) purposes and form of vocational education. Figure 13.1 depicts these factors diagrammatically, illustrating their interconnectedness. This framework is used to inform the account of the Dutch vocational education system as advanced here.

In the following sections, the premises for each set of these factors are outlined.

13.3 Historical Context/Institutional Arrangements

Vocational education systems are often associated with responses to particular crises that have arisen out of historical events and circumstances that have shaped their national institutional forms. Hanf (2002) states that many of the European vocational education systems had their genesis in changes to the social and economic systems that led to the formation of these nation states, which, in most instances, coincided with industrialisation. Certainly, the destruction and displacement of existing kinds of work and workplaces brought about by industrialisation led to the need for vocational education systems in many countries (Greinert, 2002). This was partially because the existing model of skill development founded in small and family-based workplaces as regulated by guilds before the 1800s and had been largely displaced, but also because this form of skill development was not well aligned to developing the kinds of skills required for industrialised work (Greinert, 2005) and new occupations arising from industrialisation. So, the need to develop the new kinds of skills and occupations required by industrialisation often prompted

this development because there were no traditions or practices in the community to otherwise secure that learning. The vocational education systems that emerged, however, were not only purposed to develop the new kinds of skills and occupations required by newly industrialising countries. They had other goals to achieve, most of which were institutional. Many were associated with supporting the formation of modern nation states (Gonon, 2009b). For instance, there was a concern for securing the population's affiliation with the newly formed nation state, and overcoming an allegiance to the "estate". That is, just as trade workers owed their allegiance to guilds, many workers in the transition to nation states owed their allegiance to the aristocrats upon whose land they lived (Stratmann, cited in (Heikkinen, 1994). As a consequence, one goal for education systems established by newly formed nation states is to assist in shifting affiliations and allegiances to the state, and away from the estate. There were also concerns that socialist movements or disorderly behaviour might undermine or disrupt these nascent and fragile nation states (Heikkinen, 1994; Troger, 2002). Concerns about having large numbers of unemployed and disengaged young people also drove reforms focused on educational provisions that could generate employable outcomes among this cohort (Gonon, 2009b). Of course, these trends played out in distinct ways across nation states. The Netherlands did not have a central state until the nineteenth century save for the short Batavia republic (1795–1806) which had quite radical ideas about universal education. Dutch industrialisation was very late and the first education system developed to meet the needs of a class society. Vocational education developed initially from private initiative before being taken over by the state, albeit in a fragmented but distinct way.

These kinds of concerns and outcomes were not restricted to Europe. The debates and subsequent efforts in United States to form a vocational education system were partially out of concerns about how to meet the employability needs of hundreds of thousands of young service men who would be returning from the First World War, yet who may have lacked skills that would lead to employment in civilian life (Gonon, 2009a). Similarly, in Australia, the efforts for a national vocational education system arose, firstly, from the need to develop the skills required to prepare war material in the 1940s, and then shortly thereafter in response to concerns about providing employable skills to service men and women returning from the Second World War (Dymock & Billett, 2010). So, national imperatives associated with engaging young people in educational programs that would provide them with employable skills led to the formation of vocational education systems in these countries, rather than just the development of occupational skilfulness alone. The emphasis across all of these countries was on occupational preparation of occupational skills in young people, rather than on workers' continuing education, which, if it occurred at all, was often conducted by interest groups and specific institutions, not directly through government funded programs.

The diverse approaches taken and institutional arrangements established across nation states to similar sets of imperatives were premised on particular national factors. In Germany, the provision of technical schools and the interest of workplaces led to the apprenticeship system that comprised the provision and alignment of experiences across workplaces and educational institutions (Deissinger, 1994).

Yet, this approach was not progressed in the United States, because of concerns that such institutional arrangements were not possible (Gonon, 2009a). It was held that American workplaces lacked the kinds of capacities to assist and effectively support and sustain apprenticeships as a model of initially acquiring occupational capacities. Particular institutional circumstances lead to markedly different approaches to vocational education across nation states. De-centred and non-regulated approaches leading to diverse and ad hoc arrangements in Britain and the United States, while legislated arrangements led to consistent and regulated approaches in Germany (Deissinger, 1994). Different institutional arrangements across Britain, Germany and France lead to very distinct forms and provisions of vocational education (Greinert, 2002). More so, as (Gonon, 2004) proposes, the particular cantonal system in Switzerland has led to another variations in vocational education within that country. In another example, whereas in the majority of countries most apprentices are school leavers aged between 16 and 18 years, because of particular institutional arrangements, on average Canadian apprentices are 26 years old on commencing their apprenticeships. This is because of the key role taken by organised labour (i.e. unions) in a country that lacks a national portfolio for education, and where vocational education is administered by the provinces. The simple point here is that a set of historical and institutional factors shape the form and kinds of provisions of vocational education in each nation state.

13.4 Social/Political/Physical Factors

Social, political and physical factors represented may seem eclectic, and although separately these provide useful insights, collectively they offer a means of capturing how particular national factors or circumstances come to shape provisions of vocational education. Different societies often have distinctive ways of valuing occupations, varied emphases on educational systems (e.g. vocational versus general education), particular political/governmental systems (e.g. centralised versus decentralised), cultural and linguistic differences within states (e.g. linguistic areas within Switzerland) and diverse geographical factors (e.g. location and dispersal of population). Some of these factors can have a significant impact upon how vocational education is conceived and enacted. For instance, the Federal arrangements in the USA played a particular and dramatic role in the outcomes of one of the most notable debates about vocational education. As is widely known, Dewey, the philosopher, was pitted against Sneddon, who in making a case for what should constitute the US approach to vocational education in and around 1917 was backed by powerful industrial interests. Dewey argued for vocational education largely premised upon general education, but with an occupational emphasis. Sneddon, on the other hand, argued for a form of vocational education that was highly occupation-specific. It is often stated that Sneddon, backed by those powerful interests, won the debate. Subsequently, he was appointed to a senior government position to implement that specific form of vocational education. Yet, federal governmental intentions in the

US are not always realised in or by the states who have responsibilities for and fund educational provisions (Labaree, 2011). Indeed, although Sneddon argued strongly for the establishment of a vocational education system separate from schooling systems in the US states, they all declined. These states argued that they already had a system and it was too costly and also unnecessary to establish a separate vocational education system. Instead, they elected to integrate vocational education within the existing education system, leading to the kind of community education system that, essentially, is closer to the system proposed by Dewey. The point here is that the social-political system in a federated nation state meant that the decision-making of central agencies has limited impact.

Perhaps in another political system, such as Australia's federal system, the will of the centre could have been imposed through tied-funding grants and national legislation. In particular, a historical legal precedent in Australia that gives the federal government the right to have the first take on income and other taxes means that they are able to exercise direct influence on vocational education for the most part by controlling its funding. In contrast, Canada has no national department of education, and all decisions are inevitably taken at the provincial level meaning that policy and institutions are shaped by provincial priorities and concerns. The Netherlands, with its traditions of freedom of education is characterised differently again with its higher level of greater negotiations and contestations, both of which would lead to very different kinds of outcomes. The situation in China where over 30 million students are engaged in vocational education, with 13,500 institutions and more than 2 million teachers requires certain kinds of governance arrangements and approaches to engagement than might be required for countries with smaller populations and different means of societal engagement, such as The Netherlands with its 18 million people.

Also, there is a need to accommodate physical factors such as geography. For instance, in Australia modes of apprenticeship differ across the states because of geographical factors. In the very geographically large states of Western Australia and Queensland, where apprentices might work thousands of kilometres from the nearest college, attendance in these states is based upon block release (i.e. release to college for a block of time). That is, they work 5 days a week in their workplaces and then, at one point in the year, attend the vocational college for a block period of time. In the other, geographically smaller states, most apprentices will live within a few hours travel from a college. Hence, in those states apprentices attend on a day-release basis, quite commonly 1 day a week over a number of weeks per year. In the Netherlands, with relatively short distances between town and cities, extensive public transport system and dense populations, these factors might be of less consideration. It would be wrong, however, to ignore or underestimate concerns that arise even in these circumstances, such as the time taken by students and teachers to travel and on often crowded public transport. Thus, social, political and geographical factors that arise in situationally and nationally-specific ways in particular nation states influence the provision of vocational education.

13.5 Cultural Sentiment

Cultural sentiments have a powerful influence on the structure, purposes and forms of vocational education (Billett, 2014). Of note here is the Germanic *beruf* concept; a cultural sentiment that values and supports skill development and does so as a shared community responsibility (Deissinger, 2000). Such a sentiment underpins factors such as the obligation on enterprises to provide high quality training, apprentices accepting lower levels of pay whilst training, parents knowing they will need to support their children through apprenticeships because of those low pay levels and established relationships between workplaces and local vocational education institutions ensuring that appropriate experiences are provided so that apprentices might learn effectively. *Beruf* concept is culturally powerful and, in part, obviates the need for government regulation and inspection because it is accepted as being worthwhile and important and is also a socially-shared responsibility. This cultural sentiment is not restricted to Germany; it also plays out in the German-speaking parts of Switzerland, and also in parts of The Netherlands (Onstenk, 2017a). Another example of an influential cultural sentiment is French republicanism. Arising from the great social revolution is a sensitivity about work being potentially injurious or usurious for French people (Greinert, 2002). One consequence of this sentiment is a cultural preference for a separation between education and work. This is one reason why apprenticeships are not as common a form of occupational preparation as they are in neighbouring countries such as Germany and Switzerland. Indeed, efforts to introduce apprenticeship models of initial occupational preparation are often met with resistance, and a lack of commitment which often forestalls their implementation and hastens their demise (Veillard, 2015). Also, in France, achievement within the academic institution is privileged and used as a basis for employment and promotion (Remery & Merele, 2014). Hence, whereas the provision of workplace experiences is a central feature of many tertiary education programs in some countries, this is much less so the case in France.

A different kind of cultural sentiment plays a direct role in Swedish education, and across Scandinavia. The concept of *Logom* (i.e. everybody is equal and you should not view yourselves as being above others) means that there is an emphasis on ensuring that students pass program requirements, and do not necessarily need to be graded as to the level of achievement. This approach would be unacceptable in countries where societal sentiments emphasise competition, merit and student ranking. Think of how the sentiment of American liberalism plays out educationally. This sentiment suggests that there is a provision of education in which everybody can participate without cost, yet places an obligation upon individuals to make the most of this opportunity. Ultimately it is up to each individual to ensure that they maximise the opportunity provided (Labaree, 2011). Noteworthy here, and elaborated below, is the Dutch concept of “freedom of education” that has a range of consequences for the kinds of education and the ability of centralised authorities to control the provision. This sentiment is one arising from the “school-war” fought on religious grounds at the turn of the twentieth century. Three freedoms of education

resulted from the settlement of this conflict: (i) choice of school; (ii) of foundation (i.e., to founding of the school -specific views of life); and (iii) organisation (i.e., contents of learning, methods and personnel) (Frommberger & Reinisch, 2002) that are fundamental to shaping the relations amongst the efforts of central government, social partners and the communities in which vocational education is enacted. Important here is that the cultural sentiment in the Netherlands (and before 1800, Holland, was a bundle of provinces) that had no state regulation or national curriculum. Only with the brief French occupation did national regulations emerged. The school war (to have freedom of education) can also be understood from a sentiment to organise education at the local and not the national level. In this way the formation of and formulations of ‘State’ is at odds with how Dutch regulations develop perhaps captured in the term ‘polderen’, meaning everything has to be negotiated.

13.6 Purposes and Form of Vocational Education

As indicated above, these three sets of factors lead to particular purposes and forms of vocational education within nation states, albeit in the Dutch situation the power of central government has been more constrained by provincial factors than in other states. Vocational educational provision, like those of other educational sectors, should be and usually is purposive and intentional, and is ideally the product of informed, considered and broad engagement (Billett, 2011). That is, the actual provisions ought to be directed and guided by particular and considered intentions. However, as outlined above, often the broad purposes for establishing, developing further and transforming educational systems are responses to perceived or real crises as exercised by central governments in their desire to achieve particular outcomes. By degree, the goals for vocational education can be the product of community debate, combined with the interests of social partners. Yet, when urgency demands, as increasingly seems to be the case, the express expectations of government drive imperatives, changes and reforms that may or may not capture the interests of those who employ, represent workers, work and study. It follows, therefore, that the sets of factors laid out above are generative of particular types of purposes for vocational education, which in turn shapes the provisions.

13.6.1 Purposes

The particular sets of factors laid out above, aim to direct the purposes or stated intents of vocational education systems in specific ways. For instance, historically, although still the case in some countries and some educational systems, there was a chosen emphasis on vocational education being about preparation for working life (Dewey, 1916), but not necessarily associated with a specific occupation. Yet, in contemporary times, increasingly, even in countries favouring a more general

approach to post-compulsory education, there is a growing focus on vocational education being directed towards the initial development of occupational capacities, as is the case in The Netherlands. The demands of government for young people to have an employable qualification before they can qualify for welfare benefit the applied higher education provisions are evidence of this, albeit in a ways that is country-specific. In some instances, this extends to expectations associated with making students and graduates “job ready” (Organisation for Economic Co-operation and Development, 2010). That is, not just being prepared for a specific occupation, but that preparation extending to being specifically competent to carry out a specific job. Of course, even these kinds of goals differ depending upon whether the education provision is located in specialist vocational education institutions or in schools that have general education as their main concern, as is the case in The Netherlands. There have also been elements of vocational education programs that focused on societal engagement (effective and engaged citizens), in some ways responding to or trying to compensate for students who were not wholly successful in compulsory education. In these situations, vocational education includes developing capacities associated with numeracy, literacy, communication and citizenship. Hence, even the most occupationally-specific programs, such as apprenticeships, have also had purposes associated with these kinds of educational goals, as was previously the case in Australian apprenticeship programs. As an example of how these purposes can change; employer complaints that these subjects were not directly related to the skills needed to be effective in their workplaces, led to these general educational goals being removed from Australian apprenticeship programs.

However, not every vocational educational purpose is directed towards initial occupational preparation for young people. Often aligned with adult education, but more recently associated with goals associated with lifelong learning, the educational purposes of vocational education can also be associated with further education of either a general or more specific nature (e.g. social /economical betterment). A focus on cultural and social betterment was the original focus for the “further” education provision within the Australian Technical and Further Education (TAFE) system. Further education was a significant element of that provision up until global emphases on and reforms associated with lifelong education (Organisation of Economic and Cultural Development (OECD), 1996) meant that adult education had to be increasingly shaped toward economic purposes (Edwards, 2002). Currently, in a number of countries (e.g. Australia, Singapore, Canada, Finland, Sweden, Denmark) part of that broad agenda for education being responsive to the changing requirements of work and workplaces emerges more prominently as a factor of continuing education and development or professional development, as it is sometimes described (Organisation for Economic Co-operation and Development, 2006). That is, a provision of education not necessarily focused upon initial occupational development, but on sustaining and developing further student occupational capacities (i.e. employability). In these ways, a range of different kinds of purposes directs the provision of vocational education.

The sets of factors laid out above also influence the forms of vocational education and its governance.

13.6.2 Forms of Vocational Education

The form and shape of national vocational education systems and their means of governance are shaped by the factors set out above. One broad distinction that can be made between these is whether the governance of an educational system is ordered in a “top-down” way or whether “bottom up” decision-making and discretion is encouraged and exercised and to what degree. While it is accepted that the vast majority of vocational educational provisions are organised through the state (Skilbeck, 1984), the question is the degree to which educators can and are authorised to respond locally to the perceived needs of students and industry, or whether these are ordered by central agencies, and which differs across systems and time. A growing feature of contemporary governmental intervention in vocational education in many countries is a strengthening of top-down decision-making that often marginalises local practitioners, such as teachers, and diminishes their discretion. The engaged and exercise of industry control is sometimes justified in terms of these decisions being too important to leave up to teachers (Billett, 2004). This seems more prevalent in some systems than others. With governmental constraints being placed upon available resources, a trend of increased administration, intervention and management of what is taught, how it is taught and how student learning is assessed, and how educational programs are evaluated is now apparent (Vähäsantanen, Hökkä, Eteläpelto, Rasku-Puttonen, & Littleton, 2008).

Yet, even within these trends, some systems appear to afford teachers greater discretion than others. For instance, it is often claimed that a key factor in the German vocational education system is the local discretion afforded to vocational educators, not only in terms of content, but in the partnerships formed with local enterprises to secure effective and tailored apprenticeship arrangements (Deissinger, 1994; Deissinger & Hellwig, 2005). However, these arrangements are far from fixed. Indeed, when governments try to enact more control over what teachers do in vocational education it can be the source of frustration, resistance (Baverstock, 1996; Vähäsantanen et al., 2008; Warvik, 2013) and tension resulting in constraints on educational provisions and experiences. Hence, when decision-making is primarily centralised and top-down, the form of vocational education is shaped by processes that value uniformity and adherence to centrally-decided means and measures. National syllabuses become more detailed (i.e. teacher-proofing), tightened certification and uniform approaches to credentials become dominant. Such means come to shape the form of vocational education. Equally, in systems where educators are afforded discretion and local negotiations with social partners are permitted, vocational education exists in different forms.

A key indicator, therefore, for the character of national vocational education systems is the degree of discretion afforded teachers and the scope of their roles. This extends to the degree to which there is a requirement to be professionally prepared for the role of vocational educator. Again, in countries where there is a strong societal commitment to the development of skills, those who teach and also support learners must meet stringent requirements and high expectations (Deissinger, 1994).

Conversely, seemingly, in those countries that seek firmly to centrally administer the provision of vocational education (Brennan Kemmis & Green, 2013), the requirements for a professional preparation are being removed, and instead short courses for instructional skills are mandated. Over time, this will lead to a professionally limited teaching workforce that runs counter to the very rhetoric that often accompanies the need for reforming vocational education systems: the requirement to be responsive and flexible and having an established provision of vocational education able to attract and retain young people in the occupations for which they are being prepared. A key characteristic of current and emerging top-down models of the governance of vocational education is to minimise the contributions of vocational educators in informing what should be taught, how it should be taught, what should be assessed and the means by which should be assessed. All of this is particularly curious because, in many vocational education systems, such as Germany, Switzerland and Australia, the teachers' occupational expertise has been the basis of their recruitment and employment as educators (Billett, 2013).

Another characteristic of vocational education systems is the nature and quality of their relations with what is referred to as "industry". Is that relationship best built on mutual respect and trust and a product of collaboration in providing appropriate educational experiences, or premised upon industry determining what needs to be taught and the education system attempting to realise those requirements through highly-mandated prescriptive standards, guidelines, instructions and documentation? Again, the degree by which these relations are played out is likely to differ across circumstance, time and occupational focus (Billett, 2013). For instance, some time ago in Australia, when the economy was booming, employers had little expectation of having a direct influence upon the content of courses and how and what was taught. Instead, they suggested that this was educators' business (White, 1985). Yet, under different economic circumstances, the same employers demanded tight control over the content, teaching and who and what was taught. Also, those courses most tightly aligned to occupational requirements, particular when they are highly regulated licensed (e.g. electrical and plumbing), or are likely to have far more prescriptive content and assessment against prescribed standards than when the occupation is less regulated (i.e. contemporary music).

Another element of the educational provision is the positioning of students, whether students are primarily in that role as elements of those programs, or employees who also attend educational institutions, such as those who are apprenticed in many countries. Added to this is the degree by which the student voices are considered and engaged with in the planning, enactment and evaluation of vocational education provisions. It is indeed rare to come across a situation in which a systematic process of understanding student needs and capturing them in a way which can inform decision-making within a curriculum, the provisions of experiences and discussions about assessment. The orthodoxy that comprises curriculum development coming from schooling is not to engage with the voice of students; this tradition seems less plausible in the education of adults. Indeed, when asked, vocational education students indicate that they have clear goals (Billett, 1996), and make judgements about the effectiveness of the education provision in meeting those goals and

also the quality of experiences (i.e. graduate outcomes)(Billett, 1998). Indeed, data from graduates strongly indicates what they value from their education, what has led them to find employment, and overwhelmingly endorsed the contributions of their teachers (National Centre for Vocational Education Research, 1997).

These sets of factors set out above and their consequences for the purposes and forms of vocational education are advanced here to describe and substantiate a framework through which to elaborate and illuminate the Dutch vocational education system. It is held that such a framing allows that system to be understood through an elaboration of the factors and imperatives that shape it, and also to permit an informed comparison with other vocational education systems. It follows, therefore, that in the next section, these same measures are applied to the Dutch vocational education system.

13.7 Elaborating on the Dutch Vocational Education System

The origins of, changes to and transformations of national vocational education systems often arise through social and economic crises, and the Dutch vocational education system seems to be no exception. Its formation and initial form arose from changes brought about by industrialisation and engagement by the nation state albeit under the auspices of a brief French occupation and the short Batavia Republic (Frommberger & Reinisch, 2002). Over time, however, the system that emerged was shaped by sentiments that were distinct from both France and neighbouring Germany. Initially advanced by private (i.e. civic) organisations and some employer organisations, subsequent crises or perceptions of crises have brought about changes to the system as constituted through negotiations interactions between local communities and central government, but in ways distinct from a federal system such as Germany. There have also been concerns expressed by social partners such as employers and employees, and also local communities, as many contributors to this edited volume acknowledge. Subsequently, there have been concerns about the quality of teaching, student outcomes and the extent and kind of governance arrangements being enacted in the management of vocational education institutions (van der Klink & Streumer, 2017). Hence, as in other countries, what (van der Meer, van den Toren, & Lie, 2017) refer to as institutional fields have had key roles. Indeed, it is proposed that in The Netherlands, the particular quality of engagements between central government and the vocational education system, whilst negotiated, emphasises sets of expectations from national government and social partners. Yet, as proposed by a range of current accounts, the outcomes of these negotiations were not always matched by the adequacy of the: (i) adopted curriculum arrangements (Meijers, Lengelle, Winters, & Kuijpers, 2017; Wesselink & Zitter, 2017), (ii) teacherly practices enacted (De Bruijn & Bakker, 2017; van de Venne, Honigh, & van Genugten, 2017; van der Klink & Streumer, 2017) and (iii) educational models of governance (Westerhuis & van der Meer, 2017) required to achieve the kinds of outcomes demanded of the system (van der Meer et al., 2017). In responding to

actual or perceived social and economic crises, the negotiations amongst central government, national social partners and local institutions have come to shape the particular purposes and forms of the Dutch vocational education system, as stated in many of the aforementioned contributions.

In this section, therefore, and drawing largely on the other contributions to this book, the aim is to capture something of the dynamics arising from these crises and to illustrate how they have influenced the provision of vocational education and training in The Netherlands that extends to its original formation and the factors shaping its changing form and purposes. As set out above, these sets of factors are: (i) historical/institutional arrangements, (ii) social/political/physical factors, and (iii) cultural sentiments. While each of these sets of factors could be further divided and elaborated, they seem to offer a basis that can inform the (iv) purposes and form of Dutch vocational education.

13.8 Historical Context/Institutional Arrangements

As was the case in many other nation states (Greinert, 2002), the development of a national vocational education system in the Netherlands was the product of changes in social and economic structures and those associated with industrialisation, in which the Netherlands was a late starter (Onstenk, 2017b). Indeed, the historical and circumstantial factors played out in particular ways leading to a distinct vocational education system. (Frommberger & Reinisch, 2002) note that while events in the Netherlands and Germany shared some similarities in terms of the removal of ancient guilds and increased government intervention, there were obvious differences in the formation of their respective vocational education systems. The brief French occupation of Holland and subsequent Batavian Republic led to a decline of the ancient guilds and a deregulation of trades. Elsewhere, it has been noted that, whereas in Germany the guilds were replaced by bureaucratic arrangements, in Republican France they were dispensed with entirely, being seen as obnoxious elements of the Ancient Regime (Troger, 2002) that could potentially serve as disruptive intermediaries between the individual and the state (Frommberger & Reinisch, 2002). As well, given sentiments in Republican France about the exploitative nature of employment, trades were also deregulated in contrast to what happened in other countries, and there was also a strong disaffection for aligning education with work (Remery & Merele, 2014; Veillard, 2015). Thus the sentiments aroused during the brief French occupation at that time did much to shape the initial approach to vocational education in The Netherlands, which was later re-shaped by strong liberal traditions. The shaping process included developing a stronger preference of initial occupational preparation occurring within educational institutions (i.e. *Ambachtscholen*), rather than through apprenticeships (Frommberger & Reinisch, 2002; Onstenk, 2017b). *Ambachtscholen* were initially founded as a private sector response to concerns about the need for basic work skills and work discipline, and as a correction of the perceived failings of general education in preparing

individuals adequately for workplace roles. Later, they were taken over by the state. Yet, much later, after the end of the Second World War and under state control (1968), the educational focus within these institutions came to centre on general

In the recent epoch, as in many other countries, Dutch vocational education has been the subject of intense governmental attention and cycles of reform that often disrupt established programs, regardless of their perceived value. This led to the imposition of a new set of purposes and provisions, which themselves became subject of critique and rebuttal (De Bruijn & Bakker, 2017). Subsequent reforms responded to some criticisms of these measures, but pressed on with others. In particular, those associated with forms of control and seeking direct alignments between vocational education provisions and the labour market appear to have progressed, but in ways that are often seen as being remote from the realities of those provisions and those markets at the local level. What is perhaps distinct about the Dutch system is that there are historically founded institutional arrangements and societal sentiments associated with Freedom of Education that pressed for negotiation and reconciliation between the imperatives and actions of central government, and the circumstances where these programs were being enacted. Indeed, this movement was distinctly different to what occurred in France, where such freedom was from feudalism, including religiosity. In the Netherlands, it was a reconciliation of conflicts between Catholic and Protestants in the early years of the twentieth Century, and a struggle for all groups to have the freedom to organise their own education, and in ways that were nation specific.

In the Dutch context, the differentiation between either being “top down” or “bottom up” reforms is complicated. For instance, negotiations between central agencies and local providers led to the modification of and even retreat from centrally established policies. These include changing language associated with vocational education from including terms such as competence through to occupations have been occurred (Wesselink & Zitter, 2017). This change progressed through negotiation processes of a different kind to those occurring in other nation states, particularly those in which central governments operate more forcefully and even dictate policy centrally.

One facet of this institutional divide was the establishment of now long-standing cooperative traditions between vocational education institutions and industry across the twentieth century. This tradition was one upon which regional approaches were developed, followed by the construction of Regional Education Centres (ROCs) of in the 1990s, as a direct result of the mergers of local schools (Westerhuis & van der Meer, 2017), albeit within a national qualification framework. Local arrangements and negotiations (i.e. personal relationships between schools and local businesses) had sustained partnerships which have been central to the provision of vocational education. Moreover, unlike the case in other countries, a number of the vocational education schools in the Netherlands were founded by private bodies (i.e. industry groups) and partially funded by government, so distinct traditions played out here.

However, the introduction of national qualification structures and influence on curriculum (Wesselink & Zitter, 2017; Westerhuis & van der Meer, 2017), and assessment practices (Baartman & Gulikers, 2017), came about in response to concerns about enhancing the alignments between vocational education provisions and outcomes, and the needs of the labour market, similar to concerns that likewise prompted change in other countries. (De Bruijn & Bakker, 2017) provide a detailed account of how these arrangements have unfolded over the last three decades in The Netherlands. They note how evolving historical events and crises led to changes in how the kinds of knowledge that are the focus of vocational education provisions came to be scrutinised, contested and transformed, yet in ways that were characterised as negotiations amongst the central government, social partners and the local community. These negotiations led to a series of changes in the nature of the purposes of Dutch vocational education and how it was to be enacted, including the introduction of quality assurance systems. These qualification structures were intended to secure greater alignment between education provisions and the requirements of the labour market (Baartman & Gulikers, 2017). This was to be partially realised through proposing key skills on which assessment would focus, in the form of specific qualification profiles (Wesselink & Zitter, 2017). The strongly educational institution-oriented focus of the Dutch vocational education system is set out in the first chapter of this volume. Yet, the complexity of and multi-levels of educational programs made it difficult to be responsive to industry (i.e. local company) needs, such as the drive to ensure that young people attained an occupationally-aligned leaving qualification. Moreover, competition amongst ROCs brought about marketization which was aberrant and counter to concerns about local community engagement which were a primary reason for their establishment (Westerhuis & van der Meer, 2017). Also, the impact of these reforms across the entire vocational education system was differentiated. For instance, although these reforms impacted HBOs (professional bachelor studies), they did so in ways that affected the rest of the vocational education system differently. That was because the HBOs are regulated individually; for instance, they do not offer national qualifications in the way that other elements of the vocational education system do (De Bruijn & Bakker, 2017).

Thus the historical evolution and form of the institutional arrangements central to the Dutch vocational education system are quite distinctive. They have led to governance processes that comprise relations between central government and local institutions, and are influenced at both levels by social partners, in ways that are country-specific. However, in an era in which central governments seek to gain greater control over the utilisation of public resources and assets, this relationship has become the central focus for constructing the purposes and forms of vocational education. The emphasis on providing vocational education based primarily in educational institutions, that also offers pathways across into HBOs and that is expected to provide young people with employment-related outcomes have a direct outcome on the kinds and form of vocational education in The Netherlands.

13.9 Social/Political/Physical Factors

As was the case in many other countries, as mentioned, governmental reforms in the 1990s aimed to secure a stronger alignment between the provisions of vocational education and the needs of national labour market in The Netherlands (De Bruijn & Bakker, 2017). One of the key proposals advanced in the 1996 Education and Vocational Schooling Act was for students to have more access to experience in work settings, so they could come to understand the requirements of work and develop the capacities to practice effectively in the workplace (Wesselink & Zitter, 2017). Yet, this did not necessarily sit well with a vocational education system whose provisions are largely based within educational institutions, and where extensive structured entry-level training including workplace experiences, as in apprenticeships, is not a central element of that system.

The creation of ROCs has helped shape recent vocational education provisions (Westerhuis & van der Meer, 2017). The meaning of regions and regionalism in The Netherlands is somewhat distinct. Whereas in other countries regions are often politically-bound entities, in the Netherlands, a geographically small, but densely populated country, regions relate more to a local community, its workplaces and institutions, and how these can be served by vocational education. Hence, rather than decision-making about education falling to a political entity (i.e. land, state, county) much of this is undertaken locally and situationally. Hence, the tensions between national mandates and requests for local flexibility have come to question and potentially stymie the emergence of a vocational education sector, by means of the ROCs, in its own right (Westerhuis & van der Meer, 2017).

Tensions in relations between regional and national decision-making were expected to be addressed through deliberations about VET qualifications, but this did not always happen. For instance, the qualification profiles developed centrally were seen to be too specific and inflexible (Baartman & Gulikers, 2017; Mulder, 2014). This led to their re-negotiation and the implementation of qualification profiles that had a more general educational focus than the earlier highly-specific occupational profiles, which included what were referred to as generic measures of occupational competence. However, these measures were found to be too broad to be applicable, and required a translation process to make them relevant to particular occupations, work settings and, therefore, assessments (Baartman & Gulikers, 2017; Wesselink & Zitter, 2017). This issue has been identified elsewhere when broad statements referring to “industry standards” were found to be impractical because of the vagueness of the term itself and the actual diversity of what constitutes industry standards of work (Nijhof, 2008). This is because industry standards for work differ widely and can be quite inconsistent in their requirements. Therefore, using such a term has been found helpful in terms of permitting judgements, but less helpful in terms of reliability of those judgements (Baartman & Gulikers, 2017).

Another example of these relational tensions was located within the process of attempting to regulate assessment practices: central government established (and then closed) a national centre intended to supervise and audit the quality of

assessments within vocational education. However, this division between central and local organisation of education lead to circumstances in which assessment practices were held to be the responsibility of the regional college, operating within a framework of self-evaluation and audit (Baartman & Gulikers, 2017). Yet, as had been the case with the statements of competency, there were complications and problems associated with performing this role; ultimately, the centre was disestablished because of its apparent inability to effectively manage the quality of assessment processes (Baartman & Gulikers, 2017).

It follows then that in The Netherlands, there a particular set of political, cultural and demographic factors, including the nature and kinds of negotiations between the centre and local interests that play out in particular ways. While framed around a highly institutionalised approach to vocational education, these factors had consequences for the kinds of governance structures and educational processes adopted in the Dutch system.

13.10 Cultural Sentiment

There is a long tradition of “school” autonomy in the Netherlands, as noted above, which is supported by societal sentiment encapsulated by the notion of Freedom of Education (Westerhuis & van der Meer, 2017). Much of the dissonance between the centre and the regions arise when there are perceived differences between culturally-derived expectations about the provisions of education the government’s ability or desire to provide resources (Westerhuis & van der Meer, 2017). This can include a drive for reforms that extends to central control over vocational education. In particular, the growth of liberal and neo-liberal policy framings increase tensions with precepts of Freedom of Education, such as the provision of competition policy which stands as being contrary to the goals of those precepts (Westerhuis & van der Meer, 2017).

Yet, whilst this aspect of societal sentiment is strong, (Harms, Hoeve, & den Boer, 2017) note that there is no strong community commitment to a science of education associated with skill development, as is the case in the German concept of the *berufspagodik*. Focus on Craftsmanship (2011) was used to implement a national policy through economic leverage. Hence, the absence of broad community support and broad engagement in and commitment to the development of initial occupational capacities and the fact that much of this provision was enacted in an educational setting, led to a strong focus on instructional practices within educational institutions, as is discussed below.

Likely, the societal sentiment was that which prompted the lengthy process of inquiry and consultations, rare for their kind, that were enacted prior to the establishment of the 1996 Adult and Vocational Education Act. These are what (Westerhuis & van der Meer, 2017) refer to as an example of the institutional tensions that arise between governmental imperatives and a societal sentiment about Freedom of Education exercised at the local level. In other systems, the government would have

been able to force the amalgamation of small institutions whereas in the Dutch context this could only be the result of engagement and deliberations, in contrast to the mandated acts that might occur elsewhere. This enables the societal sentiment of Freedom of Education to be pitted against the aspirations of central government. However, as emphasised by the Dutch laws requiring young people to obtain employment-related educational qualification, such negotiations may not always be the best vehicle to inform and support educational provisions capable of achieving goals of securing greater alignment with the labour market and also preparing students for specific occupations, and for particular workplaces.

13.11 Purposes and Form of Vocational Education

The three sets of factors outlined above are advanced as the complex of factors that underpin the particular sets of purposes and forms of vocational education in The Netherlands. The purposes are derived from the intentions aimed to be realised through the national vocational educational provisions as a result of particular laws and educational requirements. These factors also lead to the specific forms, practices and approaches to vocational education, and over time and through particular circumstances, any changes these may undergo. In the two following sections, these purposes and forms are elaborated by drawing on the contributions to this volume.

13.11.1 Purposes

Educational provisions should be directed and guided by clear intended purposes, and most of these are derived from key institutional interests such as government, industry and the needs of communities. Some educational purposes are of a general kind, such as the education of young people and preparing them for working life. Then, there are specific forms of education required to prepare people for specific occupations as required by government. These manifest themselves in particular ways in The Netherlands. For instance, young people are required to remain engaged with education until they successfully completed an unemployable qualification or secured employment. Hence, national policies focussed on making young people employable mean that educational structures emphasise mobility for students within domains of the vocational education system; from VMBO (i.e. pre vocational education for lower secondary school students) to MBO (i.e. intermediate vocational qualifications) to HBO (van der Meer et al., 2017). These purposes are a nation-specific response to two related policy goals of supporting citizen employability and promoting economic activity. Indeed, across the Western world in the last 25 years there has been a strong imperative associated with aligning educational provisions with the needs of the labour market. Activities such as the formulation of curriculum standards and also uniform and consistent (i.e. reliable) assessment processes were

all driven by a desire to close the gap between the requirements of the labour market and the vocational education and training system, albeit through top-down approaches (Wesselink & Zitter, 2017). In some ways however, these initiatives have disrupted the seemingly productive relationships that exist between local vocational education institutions, with employers given input into the content and assessment of student performance. Baartman and Gulikers (2017) provide a detailed account of these tensions and how they played out in decision-making and practices associated with assessing student performance. These prescriptions are differentiated across the vocational education system with HBOs being partially exempt as they are not constrained by national qualification systems (De Bruijn & Bakker, 2017).

Even more specifically, as (van der Meer et al., 2017) argue, an imperative such as innovation comes to form a central element of government policy, with educational institutions and programs being directed towards addressing these purposes. The purposes of vocational education, as indicated previously, are often caught in a bind between national prescription and the quest for local relevance and responsiveness (Westerhuis & van der Meer, 2017). For instance, the national policy emphasis on particular industry sectors may well be difficult to implement at the local level. As the Dutch workforce becomes increasingly reliant on contracts and as self-employment becomes more common, there is a growing need for the development of capacities associated with communication and entrepreneurship through vocational education as well as digital competence in what is required for what (Westerhuis & van der Meer, 2017) refer to as the so called twenty-first century skills. These skills also refer to the kind of qualities that students need to develop during their studies to be effective in working life, particularly when they involve engaging with others and in work settings. (Meijers et al., 2017) propose that the students require what they refer to as intrinsic motivation. They hold that because students need to learn to interact with others, make decisions and advance their learning, during the course, but also as rehearsal for what will be required of them in working life, the development of these kinds of qualities becomes an important educational goal. Yet, as (Meijers et al., 2017) report, commonly the form of vocational education is quite monological. That is, the kinds of experiences it provides are not well-aligned with achieving the desired kinds of outcomes.

Dewey (1916) proposed there are two key purposes to vocational education. The first is to identify to what occupation an individual is suited, and, following this, to assist that individual develop the kinds of capacities required for their selected occupation. In recent reforms within the Dutch education system there has been an emphasis on career guidance and providing students with advice about careers and career pathways. However, (Meijers et al., 2017) conclude that this is an “add-on” rather than being central to the educational provision, and is, therefore, not wholly effective. Dewey’s point about the necessity of gaining understandings about what careers individuals are suited to as a precursor to selecting educational programs seems to be ignored here. This is a common complaint made by career advisors across many countries. Not the least of these concerns is that providing information is insufficient; any assumptions made about whether students can and are able to make rational career choices remain questionable without them experiencing those

occupations being enacted (Meijers et al., 2017). Certainly, there are many instances of young people making career choices at the time they are forming their gendered identities which later turn out to be markedly inappropriate.

13.11.2 *Forms*

As outlined earlier in this chapter, most forms of vocational education provisions in Netherland are institutionally-based. That is, just as is the case in countries such as Sweden and Denmark, they are largely undertaken under the auspices of and within vocational education institutions. Compared with counterpart approach in Germany and Switzerland, there is a comparatively limited set of arrangements where these provisions extend into workplace settings, particularly those that are structured such as apprenticeships, in which the apprentices are employees. Indeed, the lack of such traditions, led to establishment of arrangements like the Regional Practice Centres in creating work-based learning arrangements such as apprenticeships with ROCs. Whilst there are workplace based components of programs they have not adopted the broad provisions of apprenticeship education that features in neighbouring Germany.

To this day, centres in the construction industry continue to host apprentices, even while employers are reluctant to do so, even after the abatement of the global financial crisis (Onstenk, 2017b). Instead, there is more interest in simulated work-activities or placements – a preference for educational institutional practices (Onstenk, 2017b). Yet, despite the importance of building localised relationships and partnership to provide these experiences, as is the case across the border in Germany, increasingly, the regional provision of vocational education is premised on a market model (i.e. competition) rather than partnerships (Westerhuis & van der Meer, 2017). In some ways, this positions the vocational education system to undertake tasks at the behest of government, rather than responding locally. (Westerhuis & van der Meer, 2017) claim that, rather than building upon this relationship, it was eroded by the demands made by the regional provision of vocational education, through the manoeuvring and imperatives of the various parties. Indeed, emblematic of the negotiations and tensions between the centre and local institutions is that in attempting to be regionally-relevant and responsive, the constraints of national uniformity put these local relations under pressure (van de Venne et al., 2017; Westerhuis & van der Meer, 2017). Ultimately, the lack of co-operation between ROCs and workplaces make effective provisions of workplace learning difficult to establish, enact and sustain (Onstenk, 2017b).

As a consequence of these relations and strong institutional focus the ambit for pedagogical activities is about utilising and trying to augment experiences in educational settings (Harms et al., 2017) to compensate for the lack of workplace experiences. So, whereas the *berufspagogik* is an approach based around the requirements of particular occupations, the approach taken here is very much about pedagogical science focused on the provision of experiences within educational institutions.

In the absence of long-term structured workplace experiences, these approaches have been characterised as being threefold: (i) workplace learning experiences and their integration into the educational program; (ii) creating flexible pathways for students through educational programs; and (iii) promoting self-directedness in students. The point is that all of these strategies are very much educational-institution based. This circumstance, for instance, has led to a range of learning enterprises within these institutions which according to (Harms et al., 2017) range from restaurants to food factories, and from day-care centres to administrative offices. From these circumstances have arisen needs to investigate how to improve and enhance these provisions of vocational education. Research on hybrid learning environments is being led by Dutch researchers (Zitter et al., 2017).

Another aspect of this institutionalised approach is to focus on specified learning outcomes in the form of competency statements and to use these to direct and guide the educational effort (De Bruijn & Bakker, 2017; Wesselink & Zitter, 2017). This, then, is a set of considerations associated with identifying outcomes and then enacting educational experiences to achieve those outcomes. Such an approach places an emphasis on the ability to articulate and capture statements of competence that do justice to the performances they are purporting to represent (De Bruijn & Bakker, 2017). The common complaint is that these types of measures only address observable and measurable aspects of performance rather than those which, whilst difficult to capture, are the most important learning outcomes for demanding tasks such as those comprising paid employment. That is, those that underpin the thinking and acting yet are not observable and cannot be validly captured in one-off assessments. On the other hand, when the statements of competence are too broad, they lose meaning because of their generality (Harms et al., 2017). However, there is a broader commitment to the development of applicable learning outcomes (i.e. tacit, situated and embodied knowledge) and that this is a consistent focus across the entire vocational education system, including HBOs (De Bruijn & Bakker, 2017). Further, (Meijers et al., 2017) proposed that there is a contradiction between the requests for developing twenty-first century skills that includes active engagement and agency on the part of the individual, and the kind of model of vocational education that is prevalent and most favoured by administrative emphases, rather than educational ones. That is, approaches that focus on measurable statements of competence (De Bruijn & Bakker, 2017) and the kind of teaching approaches that are favoured in cost-effective provisions of educational provisions (e.g. large group size) may run counter to achieving these outcomes (Meijers et al., 2017). These authors propose that unless foundations exist that are associated with effective career choice and also the development of capacities allowing students to engage effectively and agentically in work-related activities, that much of that which follows may be ill-placed and inappropriate. They point out, for instance, that the emphasis on students having work experiences, whilst helpful, may overlook the absence of a supportive learning environment in these settings. Instead, it will be up to the students to engage and learn effectively, but in ways which quite distinct from classroom type engagements. Unless they are prepared for these kinds of experiences, they may struggle to make the most of them.

It follows, that these researchers suggest that a key role for teachers is to develop these kinds of capacities in their students and that this may not be best achieved by monological approaches to education. Instead, they emphasise the importance of having two-way interactions (i.e. dialogues) between teachers and students, and enacting educational processes based around those premises. They refer to the importance of having learning environments either in the educational institution or workplace that are: (i) practice-based; (ii) promote dialogic interactions and (iii) foster co-operation and consensus (Meijers et al., 2017). Here, there is a key focus on teachers and teacher roles. These roles may well have to extend beyond the educational institution into the workplace. Because, whilst these researchers refer to the importance of such practices being exercised in workplace, they also raise concerns about whether this can and will be the case. Consequently, it may be necessary for teachers to reach into, or prepare students for experiences in, work settings. Again, these all emphasise the role of the teacher, not only as a designer of experiences but also as requiring understandings about workplace interactions, and also engaging with students in ways which are dialogic rather than didactic.

However, despite all of this interest in and reliance upon the quality of teachers and teaching, the professional development of vocational educators is often overlooked and/or seen as being a low priority for resources (van der Klink & Streumer, 2017). They infer the obvious point that, as in many other countries, whilst the vocational education system exhorts the importance of having effective occupational preparation and, indeed, the mainstay of its efforts are directed towards that goal; it is rarely exercised towards its staff. Yet, given the specific importance placed upon the quality of educational experiences proposed by government and focused at the institutional level, it seems strange that preparation to be a vocational educator is so limited. Indeed, the premise is that if individuals have an undergraduate degree from an applied university in the content area this permits them to be able to effectively teach that content (van der Klink & Streumer, 2017). Generally, it is acknowledged that vocational education has the most diverse range of students of the educational sectors and teachers are required to “teach” those students at a wider range of qualification levels than occurs within compulsory or university education. Variation in the age, educational background and language competence are also widely dispersed within vocational education student cohorts. Moreover, given the changing nature of the requirements for work and specific occupations, those preparing students to participate effectively in those occupations and contemporary working life require opportunities for maintaining the currency of their occupational capacities and also understandings about the kinds of work situations in which their students and graduates will engage. However, systematic and well-directed programs to promote this development appear to be in the minority, despite the requirement to have a developmental plan in place at the institutional level (van der Klink & Streumer, 2017).

Considerable effort is, therefore, being exercised and research undertaken to focus on how to create learning environments that challenge traditional school-related activities and are designed to ease the transition of the students to the workplace by providing them with learning outcomes that will permit them to respond effectively

to what they encounter when they leave college and commence working life (Harms et al., 2017; Meijers et al., 2017; Wesselink & Zitter, 2017).

It seems that this institutionalised approach to vocational education and the scholarship and research associated with it is becoming a key contribution of the Dutch approach to vocational education, and particularly, higher vocational education. For instance, a number of the instructional design approaches and research and evaluation of these attempts to provide hybrid learning experiences within education institutions are focused on the Netherlands and conducted by Dutch researchers. Similarly, with this focus on pedagogic practices, the educational provision comes to rely on the capacities of teachers. There is, for instance, research and discussion about the importance of personal professional theories (PPT) which is given prominence because of the importance of teacher competency in being able to organise these experiences (Harms et al., 2017).

Curiously, many of the issues associated with teachers' capacities, and emphases on their development, are rehearsed in issues associated with the governance of vocational education. That is, whilst emphasis has been placed on a decentralised or regional model of governance of vocational education and training, the expectations and frameworks for governance and their evaluation are set out centrally, and there is considerable tension between what is set out, and what is able to be achieved locally (van de Venne et al., 2017). Merely passing the onus on to school boards and establishing sets of performance measures has repeatedly been found to be ineffective. This because they are variously remote or unable to directly influence the organisation and enactment of the provision of vocational education (van de Venne et al., 2017). Indeed, these authors identify a range of factors associated with the capacity of boards to manage multilayered organisations, the structuring and structure of schools in the VET sector, the schooling environment and also the aptness of approaches of engaging with administrators and educators in a way which adequately captures their work activities and imperatives (van de Venne et al., 2017). In many ways, the same issues faced by central government in dealing with school boards are those which are found within relations between boards and operation units within vocational education institutions.

13.12 Appraising the Dutch Vocational Education System

Overall, it has been argued that in responding to actual or perceived social and economic crises, the Dutch vocational education system in its current form and likely future manifestations will be a product of complex negotiations amongst central government, social partners and local institutions. It will be these negotiations that will come to shape the particular purposes and forms of the Dutch vocational education system. The historical and institutional context will continue to elaborate and transform over time through these negotiations, and also the continuing press of economic and social imperatives from outside of The Netherlands. The responses will be shaped by political, social and physical factors which may not be known or

predictable at this time. Certainly, recent unprecedented patterns of migration to Europe from countries whose economies, cultural practices and kinds of employment are quite different from European countries suggest that the role of vocational education in countries such as The Netherlands will have to respond accordingly. It is most likely that this system will be the one best able and most likely positioned to respond to the needs of these migrants.

As with other initiatives, if this were to be the case, there will be ongoing tensions between the imperatives of central government and also local communities in which migrants come to live in different kinds of numbers and concentrations. It is not, therefore, possible to predict the future purposes and forms of vocational education based merely upon more predictable developments within occupations and working life, such as new technologies and ways of working, nor popular meta-policies such as a focus on innovation. Instead, social, political and physical factors may come to transform both the purposes and forms of vocational education. Not the least here will be the need to assist and guide young and older adults' progression through the matrix of programs and complexity of links and associations amongst the various levels and kinds of vocational education in The Netherlands.

References

- Baartman, L., & Gulikers, J. (2017). Assessment in Dutch vocational education: Overview and tensions of the past 15 years. In E. De Bruijn, S. Billett, & J. Onstenk (Eds.), *Enhancing teaching and learning in the Dutch vocational education system: Reforms enacted*. Dordrecht, The Netherlands: Springer.
- Baverstock, F. (1996). *The effects of the implementation of competency-based curriculum on how teachers do their jobs: A small scale study*. Unpublished masters thesis. Melbourne, Australia: Monash University.
- Billett, S. (1996). Constructing vocational knowledge: History, communities and individuals. *Journal of Vocational Education and Training*, 48(2), 141–154.
- Billett, S. (1998). Situation, social systems and learning. *Journal of Education and Work*, 11(3), 255–274.
- Billett, S. (2004). From your business to our business: Industry and vocational education in Australia. *Oxford Review of Education*, 30(1), 12–33.
- Billett, S. (2011). *Vocational education: Purposes, traditions and prospects*. Dordrecht, The Netherlands: Springer.
- Billett, S. (2013). Towards a mature provision of vocational education. *International Journal of Training Research*, 11(2), 184–194.
- Billett, S. (2014). The standing of vocational education: Sources of its societal esteem and implications for its enactment. *Journal of Vocational Education and Training*, 66(1), 1–21.
- Brennan Kemmis, R., & Green, A. (2013). Vocational education and training teachers conceptions of their pedagogy. *International Journal of Training and Research*, 11, 101.
- De Bruijn, E., & Bakker, A. (2017). The role and nature of knowledge in vocational programmes. In E. De Bruijn, S. Billett, & J. Onstenk (Eds.), *Enhancing teaching and learning in the Dutch vocational education system: Reforms enacted*. Dordrecht, The Netherlands: Springer.
- Deissinger, T. (1994). The Evolution of the modern vocational training systems in England and Germany: A comparative view. *Compare A Journal of Comparative and International Education*, 24(1), 17–36.

- Deissinger, T. (2000). The German 'Philosophy' of linking academic and work-based learning in higher education: The case for vocational academies. *Journal of Vocational Education and Training*, 52(4), 605–625.
- Deissinger, T., & Hellwig, S. (2005). Apprenticeships in Germany: Modernising the dual system. *Education and Training*, 47(4/5), 312–324.
- Dewey, J. (1916). *Democracy and education*. New York: The Free Press.
- Dymock, D., & Billett, S. (2010). Skilling Australians: Lessons from World War II national workforce development programs. *Australian Journal of Adult Learning*, 50(3), 468–496.
- Edwards, R. (2002). Mobilizing lifelong learning: Governmentality in educational practices. *Journal of Education Policy*, 17(3), 353–365.
- Frommberger, D., & Reinisch, H. (2002). *Development of disparate structures of Dutch and German vocational education*. Paper presented at the Towards a history of vocational education and training (VET) in Europe in a comparative perspective, Florence, Italy.
- Gonon, P. (2004). Challenges in the Swiss vocational education and training system. *bwp* (7).
- Gonon, P. (2009a). 'Efficiency' and 'Vocationalism' as structuring principles of industrial education in the USA. *Vocations and Learning: Studies in Vocational and Professional Education*, 2(2), 75–86.
- Gonon, P. (2009b). *The quest for modern vocational education: Georg Kerschensteiner between Dewey, Weber and Simmel* (Vol. 9). New York: Peter Lang.
- Greinert, W. D. (2005). *Vocational education and training in Europe: Classical models of the 19th-century and training in England, France and Germany during the first half of the 20th*. Luxembourg City, Luxembourg: Office for Official Publications of the European Communities.
- Greinert, W. -D. (2002, October). *European and vocational training systems: the theoretical context of historical development*. Paper presented at the Towards a history of vocational education and training (VET) in Europe in a comparative perspective, Florence, Italy.
- Hanf, G. (2002). Introduction. Paper presented at the towards a history of vocational education and training (VET) in Europe in a comparative perspective, Florence.
- Harms, T., Hoeve, A., & den Boer, P. (2017). Pedagogic strategies for improving students' engagement and development. In E. De Bruijn, S. Billett, & J. Onstenk (Eds.), *Enhancing teaching and learning in the Dutch vocational education system: Reforms enacted*. Dordrecht, The Netherlands: Springer.
- Heikkinen, A. (Ed.). (1994). *Vocational education and culture: European prospects from history and life history*. Tampere, Finland: University of Tampere.
- Labaree, D. F. (2011). How Dewey lost: The victory of David Snedden and social efficiency in the reform of American education. In T. Daniel, T. Schlag, & F. Ostervalder (Eds.), *Pragmatism and modernities* (pp. 163–188). Rotterdam, The Netherlands: Sense Publishers.
- Meijers, F., Lengelle, R., Winters, A., & Kuijpers, M. (2017). A dialogue worth having: Vocational competence, career identity and a learning environment for 21st century success at work. In E. De Bruijn, S. Billett, & J. Onstenk (Eds.), *Enhancing teaching and learning in the Dutch vocational education system: Reforms enacted*. Dordrecht, The Netherlands: Springer.
- Mulder, M. (2014). Conceptions of professional competence. In S. Billett, C. Harteis, & H. Gruber (Eds.), *International handbook of research in professional and practice-based learning* (Vol. 1, pp. 107–137). Dordrecht, The Netherlands: Springer.
- National Centre for Vocational Education Research. (1997). *Graduate destination survey*. Retrieved from Adelaide:
- Nijhof, W. (2008). *Towards new assessment methods in VET*. Amsterdam: Max Groote Kenniscentrum voor Beroepsonderwijs en Volwasseneducatie.
- Onstenk, J. (2017a). VET and lifelong learning. In E. De Bruijn, S. Billett, & J. Onstenk (Eds.), *Enhancing teaching and learning in the Dutch vocational education system: Reforms enacted*. Dordrecht, The Netherlands: Springer.
- Onstenk, J. (2017b). Work based learning (WBL) in Dutch VET: Connecting learning places. learning contents and learning processes. In E. De Bruijn, S. Billett, & J. Onstenk (Eds.),

- Enhancing teaching and learning in the Dutch vocational education system: Reforms enacted.* Dordrecht, The Netherlands: Springer.
- Organisation for Economic Co-operation and Development. (2006). *Live longer, work longer: A synthesis report.* Retrieved from Paris:
- Organisation for Economic Co-operation and Development. (2010). *Learning for jobs.* Retrieved from Paris:
- Organisation of Economic and Cultural Development (OECD). (1996). *Lifelong learning for all.* Retrieved from Paris:
- Remery, V., & Merele, V. (2014). French approaches to accreditation of prior learning: Practices and research. In T. Halttunen, M. Koivisto, & S. Billett (Eds.), *Promoting, assessing, recognizing and certifying lifelong learning: International perspectives and practices* (pp. 265–280). Dordrecht, The Netherlands: Springer.
- Skilbeck, M. (1984). *School based curriculum development.* London: Harper and Row.
- Troger, V. (2002). *Vocational training in French schools: The fragile State-employer alliance.* Paper presented at the Towards a history of vocational education and training (VET) in Europe in a comparative perspective, Florence, Italy.
- Vähäsantanen, K., Hökkä, P., Eteläpelto, A., Rasku-Puttonen, H., & Littleton, K. (2008). Teachers' professional identity negotiations in two different work organisations. *Vocations and Learning, 1*(2), 131–148.
- van de Venne, L., Honigh, M., & van Genugten, M. (2017). Improvement of educational quality in VET: What is next? In E. De Bruijn, S. Billett, & J. Onstenk (Eds.), *Enhancing teaching and learning in the Dutch vocational education system: Reforms enacted.* Dordrecht, The Netherlands: Springer.
- van der Klink, M., & Streumer, J. (2017). Professional development of teachers in vocational education. In E. De Bruijn, S. Billett, & J. Onstenk (Eds.), *Enhancing teaching and learning in the Dutch vocational education system: Reforms enacted.* Dordrecht, The Netherlands: Springer.
- van der Meer, M., van den Toren, J. P., & Lie, T. (2017). Transforming VET: Encouraging innovation via public private partnerships. In E. de Bruijn, S. Billett, & J. Onstenk (Eds.), *Enhancing teaching and learning in the Dutch vocational education system: Reforms enacted.* Dordrecht, The Netherlands: Springer.
- Veillard, L. (2015). University-corporate partnerships for designing workplace curriculum: Alternance training course in tertiary education. In L. Fillietaz & S. Billett (Eds.), *Francophone perspectives of learning through work: Conceptions, traditions and practices.* Dordrecht, The Netherlands: Springer.
- Warvik, G.-B. (2013). The reconfiguration of adult education VET teachers: Tensions amongst organisational imperatives, vocational ideals and the needs of students. *International Journal of Training and Research, 11*, 122.
- Wesselink, R., & Zitter, I. (2017). Designing competence-based vocational curricula at the school-work boundary. In E. De Bruijn, S. Billett, & J. Onstenk (Eds.), *Enhancing teaching and learning in the Dutch vocational education system: Reforms enacted.* Dordrecht, The Netherlands: Springer.
- Westerhuis, A., & van der Meer, M. (2017). Great expectations: VET's meaning for Dutch local industry. In E. De Bruijn, S. Billett, & J. Onstenk (Eds.), *Enhancing teaching and learning in the Dutch vocational education system: Reforms enacted.* Dordrecht, The Netherlands: Springer.
- White, M. A. (1985). TAFE's curriculum dilemma: Leader or follower. *Curriculum Perspectives, 5*(1), 61–64.
- Zitter, I., Hoeve, A., & de Bruijn, E. (2017). A design perspective on the school-work boundary: A hybrid curriculum model. *Vocations and Learning, 9*(1), 111–131.