DOI: 10.1556/063.2021.00048



Radical institutional changes while maintaining strong links between VET and the labour market: The Dutch VET experience

SIMON BROEK^{1,2}*

RESEARCH ARTICLE

Received: March 14, 2021 • Accepted: December 3, 2021

Published online: May 6, 2022 © 2021 The Author(s)





ABSTRACT

This article intends to show that while the strong VET-labour market link has a long tradition in the Netherlands and likely maintains strong in the future, the dynamics that substantiate this link, especially in terms of institutional arrangement have seen a radical shift in the last decades. To explore the shifts we make use of Rageth and Renold (2020) model of three ideal types of linkages between education and employment system and the ideas concerning vocational and academic drift (Hippach-Schneider, 2014; Cedefop, 2017, 2020). This article is based on a literature review and case studies conducted in recent years on the Dutch system in the context of various (European) research projects. The article concludes that while the ownership for VET of the employment system decreased, the VET schools, due to the high level of autonomy and institutional capacities, were effectively able to install cooperation mechanism, joint delivery mechanisms in VET programmes and effective feedback mechanisms. The article shows that powerbalancing on VET content and supporting vocational drift does not necessarily require powerbalancing institutionally. In doing so, the article offers reflections to other countries' VET systems on how to balance education and labour market systems in the determination of the VET content and the governance of the VET system.

KEYWORDS

vocational education and training, institutional autonomy, employment system, education system



¹ Ockham - IPS (Institute for Policy Support), Utrecht, The Netherlands

² PhD Open University the Netherlands, Faculty of Educational Sciences, The Netherlands

^{*} Corresponding author. E-mail: s.broek@ockham-ips.nl

INTRODUCTION

In literature there is broad consensus that the link between the world of education and the world of work is of paramount importance for VET quality and attractiveness (European Commission, 2017). How this link between the world of education and world of work is institutionalised can be seen to represent a powerbalance between the education system and the employment system (Rageth & Renold, 2020). This powerbalance is conceptualised as 'linkage' between actors. Based on Niklas Luhmann's theory of social systems, to clarify the significance of the linkage between actors from the education and employment systems in VET, Rageth and Renold (2020) identify three ideal types. The first ideal type, with maximal linkage, entails equal powersharing between education and employment systems on aspects of curriculum design, application, and updating. These systems ensure that VET programmes strengthen educational careers by providing a formal certificate, but at the same time, these systems fulfil the expectations of the employment system to responding to the needs of the labour market and well-preparing for professional careers. The second and third ideal types have no linkage between education and employment actors. One of them has all the power. Ideal type 2 represents VET programmes determined solely by the education system. They focus on the connection with the education system, but lack substantive links to professional careers. Ideal type 3 entails VET programmes in which all power is held by employment-system actors. They define the qualification standards and content of the exams, resulting in unstandardized and highly specific vocational qualifications. The training takes place in the work-place. The connection with the education system is lost, while the link to professional careers and labour market is substantial (Rageth & Renold, 2020, 521).

This powerbalance, the linkages between the world of education and the world of work and the governance structure of the VET system, can also be situation within discussions concerning academic or vocational drift (Hippach-Schneider, 2014) as operationalised for the VET context in CEDEFOPs Changing nature and role of VET project (Cedefop, 2017, 2020), in which VET can either drift to a more academic/general education orientation, or in which VET can strengthen its vocational orientation at the cost of more general education directions.

The aim of this article is to use the idea of linkages and ideal types of VET to describe the historic development of the Dutch VET system (shifts from one type to others). This article intends to show that while the strong VET-labour has a longstanding tradition and that this likely maintains strong in the future, the dynamics that substantiate this link, especially in terms of institutional arrangement have seen a radical shift in the last decades. In this, it describes how finding the right mix and balance is a continuous process of adaptation and experimentation. In doing so, the article shows that the powerbalance in VET cannot fully be understood by only looking at the VET programmes and who has a say in determining their content. It also relates to institutional arrangements, i.e. who is responsible for the VET system and whether this responsibility is equally shared. Based on the analysis of the powerbalance, the article also offers a reflection on how the three scenario's for VET in 2025 as developed in the CEDEFOP Changing nature and role of VET project (Cedefop, 2020) resonate in the Dutch context.

The analysis of the Dutch situation is interesting in a European perspective as the Dutch system offers an combination of a school-based and work-based approach to VET. The Dutch system offers often a more practical inspiration for countries strengthening the work-based learning component in their VET system compared to the more traditional apprenticeship countries where (such as Germany, Switzerland, Austria). Understanding its development



pathway in terms of powerbalance offers reflections to other countries' VET systems on how to balance education and labour market systems in the determination of the VET content and the governance of the VET system.

This article is based on an literature review and interviews conducted in course of conducting case studies on Dutch VET system in the context of the European Commission's Directorate-General for Structural Reform Support (Broek, 2020), the CEDEFOP Changing nature and role of VET study (Broek, 2017) and the CEDEFOP Future of VET study (Broek, in press). The material gathered in the course of these country studies is re-analysed for the purpose of this article.

HISTORICAL OVERVIEW OF THE DUTCH VET SYSTEM AND INDICATIONS OF THE POWERBALANCE AND 'DRIFT'

To understand the current institutional landscape for VET in the Netherlands and the link of education and training with the world of work, a concise historical perspective is needed. Vocational training was provided by guilds for many centuries without government interference. The guilds were dismantled in 1798, also dismantling the guilds' apprenticeship system based on a didactical unity of theory and practice (Goudswaard, 1981). This left the vocational training largely unstructured and dependent on private initiatives as vocational training was not considered a task for the government (IVA, 2012). With the 'Wet op het Nijverheidsonderwijs' (Law on industry-training) of 1919, the government, under pressure of the societal demand for the right of education, took a more leading role in the organisation of vocational education. Still however, there was room for private initiatives and the establishment of separate 'vakscholen' (sectoral vocational schools in which companies work together in organising the vocational training). In terms of powerbalance, type 3 (employer-driven) is the more dominant. The companies are in control concerning the content of VET and how the training is provided.

With an expanding VET sector (growing number of schools and growing student numbers), after the Second World War, the public vision of vocational education and training slowly changed. It was not the only purpose to deliver qualified and specialised workers, it became the purpose to educate students for work and further training. As characterised by Klarus (2020, 103), the 1963 'Mammoth Law' (reforming the entire secondary education system), with an appeal to the fast pace and unpredictability of developments increased the focus on general education in VET. The 1963 Law (enacted in 1968) meant the integration of (more general-oriented) vocational education in the whole education system. At the same time, the 1968 'Wet op het Leerlingwezen' (dual learning act) installed a combination of learning and working and facilitated the development of 35 sectoral organisations in which employers, employee-representatives and schools participated to support learners and organising the examination of learners. This strict separation between the school-based and the dual learning pathway increased the distance between companies and the education system. This especially as the societal value of school-based education, being more oriented to general education, held a higher esteem compared to the dual-learning training. This strict separation and the lower esteem of the dual learning pathway made it for companies more difficult to attract more competent learners (Meijers, 2004).

In terms of powerbalance emerging after the 60s reforms, we see two different systems. The school-based secondary VET is reflecting type 2 (education-driven) while the dual learning



pathway is reflecting type 3 (employer-driven). However, given that the esteem of the school-based system was higher and employers had no influence on the training of more talented students that went to the schools instead of the companies for VET training, the more dominant powerbalance-type in this period is type 2. This obviously also entailed an overall academic drift of the VET system, more oriented towards general knowledge and a decreased link to the occupational practice.

End of the 1980s, economic recovery and technological renewal motivated large-scale system reforms in VET. The relationship between public-funded and private-funded education and training was revised and the government left the main financial responsibility to the VET providers (Klarus, 2020, 245). The idea was that larger, and more autonomous VET institutions, bringing together shorter and longer vocational training courses per sector together, could react better to these emerging changes while at the same time assuring the quality. Two milestones in the late 1980s and 1990s facilitated this process. Firstly, the 'Sectoryorming en Vernieuwing Middelbaar beroepsonderwijs' (Development of sectors and renewal in VET) operation reduced the number of VET schools between 1986 and 1991 from 350 to 143 (Bronneman-Helmers, 2001; Honingh, 2008, 9). Many advisory committees supported this operation emphasising that an increased economic autonomy of schools, together with a more intensive cooperation with companies and combining school-based education with in-company training could improve the connection between education and work (Honingh, 2008, 11). A second key moment for the Dutch VET system development in the 1990s was the introduction of the Vocational Education Act (Wet educatie en beroepsonderwijs: WEB), being prepared in 1995 and implemented in 1996 (Ministerie van Onderwijs, Cultuur en Wetenschap, 1995). While the 1963 Law integrated VET in secondary education the 1995 Law established a separate legal framework for VET. Since this Act, publicly funded secondary vocational education training (middelbaar beroepsonderwijs (mbo)) is mainly delivered by large publicly-funded VET providers (Regional VET colleges: Regionale Opleidings Centra (ROC's))

The introduction of the WEB had a number of consequences. Firstly, it introduced one national qualification structure for all vocational education courses. This was intended to increase labour market support for vocational education and the willingness of businesses to invest in promoting vocational education. Secondly, the Act provided the VET institutions a high level of autonomy in organising the VET programmes as long as the curricula lead to the right competences as identified by the labour market. Thirdly, the Act integrated the two pathways within the same system, namely the school based training (Beroepsopleidende Leerweg (bol)) and the work based training (Beroepsbegeleidende Leerweg (bbl)) which was previously known as the Dutch apprenticeship system (leerlingwezen). Both lead to the same qualification at four distinct levels. Fourthly, the Act introduced the qualification dossiers. The core of the WEB Act of 1996 was to bring together vocational education courses in a coherent qualifications structure, defining consistently its different levels and different learning pathways. All-in all, it meant a new division of tasks between the VET schools and the sectoral labour market organisations (that were responsible for the dual learning pathway). The sectoral organisations, also called sectoral knowledge centres, having closer links with companies were since the Act tasked only with supervision instead of actually providing VET. Hence, the strengthening of VET schools came at the costs of the reduced engagement of the labour market institutions (Klarus, 2020, 267).

In terms of the shifting powerbalance as a result of the 80s/90s reforms, with the integration of the school-based and dual pathways into one system, institutionally, type 2 (education-



driven) remained dominant as the employers lost responsibility over 'their' own dual learning system. At the same time however, concerning the VET content, we see type 1 characteristics (equal power) emerging with a structural engagement of employers and labour market institutions in the design of all VET programmes, VET training, and qualifications that fulfil the expectations of the employment system. In terms of academic drift, the integration of the school-based and dual VET system, 'vocationalised' the school-based pathway while it 'academized' the dual learning pathway. Given that the school-based system was more dominant in terms of esteem, the 'vocationalisation' is also better capturing the shift of the entire VET system in this period.

The WEB put the VET system in a state of continuous flux for at least two decades, working on consolidating VET providers, how to structure learning outcomes, what should be in the qualification dossiers (qualification descriptions). After this period, other key developments were introduced in the 2010s. One of key developments shaping the institutional landscape was introduced with the Action plan: focus on craftsmanship 2011-2015 (Actieplan: Focus op vakmanschap 2011-2015) (Ministerie van Onderwijs, Cultuur en Wetenschap, 2011). This action plan provided a quality impulse and suggested that there should be less qualifications, that there should be a more harmonised language for designing qualifications and that the qualifications should respond better to the needs of the labour market. The changes in the Vocational Education Act (WEB) went into effect in 2016. Since then, all VET schools work with the revised qualification files. With the revision, qualifications are more structured in the basic structure, profile modules and elective modules. These optional parts allow students to broaden or deepen skills to strengthen students' sectoral labour market positions within a region or it enables students to flow into higher vocational education level. Within the optional parts there is a clear link with 21st century skills like innovative thinking, learning a language (besides compulsory languages: Dutch for all, and English for level 4 students) and entrepreneurship. Students can choose from different optional parts to complement their complete programme. This tried to solve one criticism that while VET has a strong regional character and needs to respond to regional labour market needs, the learning outcomes are described in Qualification Files at national level.

A latest key development shaping the institutional landscape was introduced by a 2015 amendment to the VET Act (Ministerie van Onderwijs, Cultuur en Wetenschap, 2015). This amendment shifted all legal responsibilities, such as the accrediting and coaching work placement companies and maintaining the qualification framework for secondary vocational education, from the 17 sectoral knowledge centres to SBB, the cooperation organisation for vocational education, training and the labour market (Samenwerkingsorganisatie Beroepsonderwijs Bedrijfsleven). SBB is a tri-partite organisation, in which VET schools cooperate with labour market stakeholders. The employers hence lost their 'own' institutions that regulated to a large extent the VET system and now co-owned, with VET schools that became large and powerful institutions, the organisation that regulates the VET system.

In terms of the powerbalance, the 2000s and 2010s we see two main developments. In terms of the powerbalance related to the VET programmes and the content, we see the development towards type 1: VET qualifications have clearly a dual function (further learning and labour market integration) and additional efforts are taken to respond to labour market demands (see for instance the introduction of elective modules). On the other hand, related to institutional developments, the powerbalance clearly shifts to type 2 (education-driven) as the companies lost



their direct engagement and responsibility in the VET system. Furthermore, this period is characteristics as vocational drift, allowing more focus on craftsmanship and an increased responsiveness to regional labour market needs.

DIRECTION OF TRAVEL: INSTITUTIONAL DEVELOPMENT AND VET CONTENT

From a historical perspective, it is noticeable that the role of companies is being reduced over time. With the introduction of the WEB in 1996, the role of employers diminished (Klarus, 2020). Within the Dutch apprenticeship system, the employers were responsible for providing the apprenticeship pathway. This responsibility was shifted to the Regional VET colleges, who had to organise it with the involvement of companies. The VET schools' influence over the dual learning pathway increased at the expense of the company influence. In addition, in 2015, presented as a budget cut (decided at the peak of the economic recession in 2012, Government Rutte II), the 17 sectoral knowledge centres, who had the formal role of maintaining the Qualification Files and provide work placements for students were integrated in the SBB, a tripartite organisation. Although, this institution is partially employer-owned and has sectoral expertise, it can be seen as another moment where the involvement of employers is diminished.

At the same time, the VET providers influence over the VET system increased. This is due to the mandate they were given in the 90s, but also due to their size. When comparing the total number of independent VET schools and the number of learners in 1990 and 2015 the impact of these developments is clearly noticeable. The number of schools decreased from 325 to 62 and the number of learners increased from 322 thousand to more than 500 thousand. The average number of learners per school increased from thousand to more than eight thousand. The largest VET school is currently ROC van Amsterdam with more than 30 thousand students (Fig. 1).

Despite the reduced ownership of employers, and the dominance of the VET providers in the VET system, the VET provision is organised by the VET providers in close relationship with the labour market. There are numerous feedback-loops between VET and employers and the system makes use of the knowledge and understanding generated by these feedback-loops. These feedback-loops relate to the development/renewal of the Qualification Files, but even more to the translation of the Qualification File into a curriculum. Here VET providers and employers together take decisions concerning what specific skills are needed in the regional labour market, or about how employers can contribute to acquiring knowledge about fast-changing techniques (work-practice).

	1990/'91	1995/'96	2000/'01	2005/'06	2010/'11	2015/'16	2019/'20	Trend-line
VET schools	325	207	77	72	71	66	62	
Learners	332,295	320,442	451,988	483,812	527,917	475,872	503,852	
Average learners per VET school	1,022	1,548	5,870	6,720	7,435	7,210	8,127	

Fig. 1. Development of the number of VET schools and VET learners in the Netherlands Source: (CBS, 2020), calculations author.



In terms of the ideal types defined by Rageth and Renold (2020), a complex shift can be seen in which before the 1990s, two separate systems existed. A more general education-oriented, and school-based VET system that was associated with higher-levels VET and technical vocational education and a second work-based VET system. The first can be characterised as ideal type 2 (VET determined solely by the education system), the second as ideal type 3 (VET determined by employment-system actors). Through the developments end of 1980s and 1990s, a VET system emerged that is institutionally education-driven (type 2), but in terms of VET content can be characterised as type 1, equal power sharing between education and employment systems on aspects of curriculum design, application, and updating.

Interestingly, the shift in powerbalance in the Netherlands, is not only related to curriculum design, application, and updating, but is dealing with the whole governance and institutional setting of VET. And while indeed ideal type 1 best reflects the current linkage between education and employment system, it also hides a more significant development in which the employment systems' governance function of the VET system decreased. The education system actors, most notably the schools, due to their size and institutional capacities became powerful institutions shaping the skills development ecosystem in regions. Hence, the initiative and institutional power shifted from the employer system to the education system. In this process however, the employment system is sufficiently engaged in the determination of the content of VET.

One could ask what this reshifting of the powerbalance between employment and education system also means in terms of academic or vocational drift. One could argue that the changes in the powerbalance also entailed an academic drift. Academic drift here refers here to that the interests of the employment system are less institutionally secured, and that the education perspective becomes the more dominant orientation in the VET system. This subsequently also entailed a larger focus on general knowledge, transversal skills and further learning opportunities (Klarus, 2020). Often the plea for more general knowledge is supported by indicating the fast pace of technological development and general uncertainty in the society and economy. This link between uncertainty and general knowledge underlies the reforms in the 1960s, 1990s and the 2010s (Klarus, 2020). Given the economic developments, graduates need to be able to change professions and sectors and for this reason there is more and more attention to more transversal competences.¹

There are strong arguments supporting the conclusion that there is an increasing dominance of the education system stakeholders and an academic drift in VET. However, especially on the 'academisation'-aspect, there are several indications that this 'academisation' of VET is not the leading development in VET. Over the years while the number of Qualification Files (Kwalificatiedossiers) decreased, the total number of qualifications did not significantly decrease. Furthermore, with the introduction of the WEB and the two learning pathways leading to qualifications at all four qualification levels, the system allowed a more tailored approach to obtaining the same qualifications through different learning styles. Furthermore, the revision of the Qualification Files in August 2016, allowed the introduction of 'elective parts' and

¹This idea was for instance articulated strongly in the SER report of 1997, already asking the question how the secondary VET system should deal with increasing flexibility and mobility on the labour market (SER, 1997), but also in the Action plan: focus on craftsmanship 2011–2015 (Actieplan: Focus op vakmanschap 2011–2015) (Ministerie van Onderwijs, Cultuur en Wetenschap, 2011); and was also referred to in forward looking projections emphasising the need for transversal competences (MBO Raad, 2015).



experimentation with cross-over qualifications. These elective parts (keuzedelen) are smaller, modular qualifications that target obtaining a specific learning outcome that is desired by the student, but that also has a labour market relevance. They enable a more regional, or specialised approach to better link to changing labour market needs. Since 2017, VET schools can offer cross-over qualifications to strengthen the cooperation between regional education programs and the business life. The elective parts and cross-over qualifications are introduced to make VET more flexible towards the changing demands of the labour market and to allow a more individualised approach in VET. All in all, VET qualifications maintain oriented to labour market needs and allow adjustment to changes, while at the same time secure further learning at higher qualification levels and also in higher education (for instance through the associate degree, at EQF level 5).

The scenario work of CEDFEOP offers the opportunity to reflect on the future direction of travel of the Dutch VET system. The CEDEFOP Changing nature and role of VET project (Cedefop, 2020) developed three scenario's for VET in 2035. The first scenario puts lifelong learning at the heart of VET and offers a pluralistic concept of VET in which has weaker links to specific occupations and job and where VET is included in a lifelong learning approach and tailoring its provision to the specific needs of various VET target groups. The second scenario puts occupational and professional competence at the heart of VET, making VET a distinctive and separate education and training subsystem with clearly defined providers and institutions. The role of VET is clearly related to young people's initial education and training, especially offering in work-, and practice based learning contexts. The third scenario focuses the special purpose of VET, on training for jobs, reskilling and upskilling for short- and medium-term labour market needs. The main focus group is adults in need of re-, and upskilling. When extrapolating the powerbalance analysis to the future, it is clear that the second scenario is closely linked to the idea of VET in the Netherlands is gaining maturity, developing its distinctive value and orientation. For the future however it is foreseeable that when the position of VET in the whole education and training system is well secured and has a specific public esteem, VET will develop into a more pluralistic direction, widening its VET offer, expanding into adult learning and tailoring its service-offer to individuals, employers and society. The

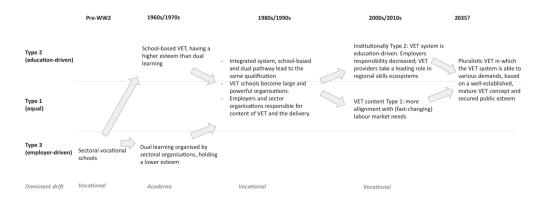


Fig. 2. Development in powerbalance and drift of the Dutch VET system between the 1960s and 2010s (and looking into the future)

Source: Author



current developments in VET and lifelong learning in the Netherlands provide indications of VET moving into this direction.

The following figure summarises the discussion, showing that the direction of travel in the powerbalance concerning institutional arrangements and the VET content differ and that a more education-system driven VET sector does not necessarily entail an academisation of the VET content (Fig. 2).

CONCLUSION

The key to understanding how the rebalancing of the powerbalance towards the education system stakeholders did not significantly lead to academisation and reduction of labour market relevance of VET lies in the character of the education system institutions developed. The VET schools, in gaining maturity, over time, developed a high level of trust with labour market actors. The cooperation between VET schools and companies – as well as the ability to find innovative solutions within the cooperation – is further supported by the size of the VET schools. Having more than 10,000 students is not an exception, which allows VET schools to have a strong and powerful voice in regional labour market issues and to create strong and reliable links with the employment system stakeholders and governments. Hence, the ownership for VET of the employment system decreased and the VET institutions developed a high level of autonomy and institutional capacities. Through these, the VET institutions, were effectively able to engage substantially with the employment system, resulting in cooperation mechanism, joint delivery mechanisms in VET programmes and effective feedback mechanisms. This assured an equal power sharing between education and employment system on the VET content and supporting vocational drift being understood as assuring responding to labour market needs.

To conclude, the Dutch VET system, while seeing major reforms in which the powerbalance shifted radically, managed to ensure putting in place main features of VET in top-performing countries. Employers are involved in setting qualification standards, deciding when an update needs to happen, and setting the examination form, and students spend most of their time in the workplace instead of the classroom (Rageth & Renold, 2020). But still, one could question whether the involvement of the employer system in determining the VET content is sufficient on the long run when it is not supported by an equal institutional powerbalance between education system and employer system.

REFERENCES

Broek, S. (2017). The changing nature and role of vocational education and training in Europe: Case study focusing on The Netherlands. https://www.cedefop.europa.eu/files/the_netherlands_cedefop_changing_nature_of_vet_-_case_study.pdf.

Broek, S. (2020). Dual learning in flanders: Professionalisation of teachers—project supported by the European Commission's directorate-general for structural reform support (DG REFORM). https://ockhamips.nl/Portals/57/OpenContent/Files/4902/Dual_learning_in_Flanders_-_professionalisation_of_teachers_2020_B129-1.pdf.



- Broek, S. (forthcoming). The future of vocational education and training in Europe: Work assignment 2: Case study The Netherlands.
- Bronneman-Helmers, H. M. (2001). Deregulering en marktwerking: Tussen droom en daad. In M. van Dyck (Ed.), *Onderwijs in de markt* (pp. 246–269). Den Haag: Onderwijsraad. [Deregulation and market forces: Between dream and deed].
- CBS. (2020). StatLine—onderwijsinstellingen; grootte, soort, levensbeschouwelijke grondslag. https://opendata.cbs.nl/#/CBS/nl/dataset/03753/table?dl=3D073 [StatLine—Educational Institutions; size, type, ideological basis].
- Cedefop. (2017). The changing nature and role of vocational education and training in Europe. Volume 1: conceptions of vocational education and training: An analytical framework: Vol. No 63. Publications Office of the European Union.
- Cedefop. (2020). Vocational education and training in Europe, 1995-2035: Scenarios for European vocational education and training in the 21st century (Vol. 1–Cedefop reference series). Publications Office of the European Union. http://data.europa.eu/doi/10.2801/794471.
- European Commission. (2017). Business cooperating with vocational education and training providers for quality skills and attractive futures. https://ec.europa.eu/social/main.jsp?catId=738&langId=en&pubId=8053&furtherPubs=yes.
- Goudswaard, N. B. (1981). Vijfenzestig jaren nijverheidsonderwijs: Een onderzoek betreffende het nijverheidsonderwijs zoals het in Nederland aan jongens en ouderen is gegeven vanaf de officiële opheffing van de gilden in 1798. Assen: Van Gorcum. https://repository.ubn.ru.nl/bitstream/handle/2066/148008/mmubn000001_026797925.pdf?sequence=1 [Sixty-five years of industrial education: An investigation of industrial education as it has been given to boys and the elderly in the Netherlands since the official abolition of the guilds in 1798].
- Hippach-Schneider, U. (2014). Academisation or vocational drift International developments in the tertiary sector of education. *Berufsbildung in Wissenschaft und Praxis*, 43(4), 27–29.
- Honingh, M. E. (2008). Beroepsonderwijs tussen publiek en privaat: Een studie naar opvattingen en gedrag van docenten en middenmanagers in bekostigde en niet-bekostigde onderwijsinstellingen voor middelbaar beroepsonderwijs. SCO-Kohnstamm Instituut. https://pure.uva.nl/ws/files/1070887/54426_thesis.pdf [Vocational education between public and private: A study of the attitudes and behavior of teachers and middle managers in government-funded and non-subsidized secondary vocational education institutions].
- IVA. (2012). Historische schets examinering in het MBO. [Historical overview examination in the VET]. https://www.iva-onderwijs.nl/resources/js/tinymce/plugins/imagemanager/files/Rapporten_2012/3_ Historische_schets_examinering_in_het_MBO_24-10.pdf
- Klarus, R. (2020). 'Waar wij een vak leerden': Honderd jaar lager en middelbaar beroepsonderwijs. Boom. ['Where we learned a trade': One hundred years of primary and secondary vocational education].
- MBO Raad. (2015). Het mbo in 2025: Manifest voor de toekomst van het middelbaar beroepsonderwijs. [MBO in 2025: Manifesto for the future of secondary vocational education]. https://www.mboraad.nl/sites/default/files/publications/het_mbo_in_2025_manifest_voor_de_toekomst_van_het_mbo.pdf
- Meijers, F. (2004). Het verantwoordelijkheidsdilemma in het beroepsonderwijs. [The responsibility dilemma in vocational education]. https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=&ved=2ahUKEwjC-_S-9PL1AhXInKQKHRDsBKgQFnoECAYQAQ&url=https%3A%2F%2Fhbo-kennisbank.nl%2Fresolve%2Fhaagsehogeschool%2FeyJoIjogIJJJZDUxMDE5YTIwM2JiNjgzNzQ4ODI1NWEwNTJhMWM3MDIxOWU4ODIxMDFlYzM0MDIzYmI5MDhiYjc0MDJiZTQiLCAidSI6ICJodH



- RwczovL3N1cmZzaGFyZWtpdC5ubC9vYmplY3RzdG9yZS84NTgxNDEwZC1jMDdkLTQwMTktOGNmZC0zYzgzODczNjRhYzAifQ%3D%3D&usg=A0vVaw2XdA1Ct2v4xGgb6IZoc2e2
- Ministerie van Onderwijs, Cultuur en Wetenschap. (1995). Wet educatie en beroepsonderwijs [Wet]. https://wetten.overheid.nl/BWBR0007625/2017-01-01#HoofdstukI [Education and Vocational Education Act].
- Ministerie van Onderwijs, Cultuur en Wetenschap. (2011). Actieplan: Focus op vakmanschap 2011-2015. [Action plan: Focus on craftsmanship 2011-2015]. https://www.tweedekamer.nl/kamerstukken/detail?id=2011Z03168&did=2011D07923
- Ministerie van Onderwijs, Cultuur en Wetenschap. (2015). Wijzigingswet Wet educatie en beroepsonderwijs, enz. (Overgang wettelijke taken van kenniscentra beroepsonderwijs bedrijfsleven naar Samenwerkingsorganisatie beroepsonderwijs bedrijfsleven) [Wet]. https://wetten.overheid.nl/BWBR0036592/2017-08-01 [Amendment Act on the Education and Vocational Education Act, etc. (Transition of statutory tasks from knowledge centers for vocational education in the private sector to the Cooperation Organization for vocational education in the private sector)].
- Rageth, L., & Renold, U. (2020). The linkage between the education and employment systems: Ideal types of vocational education and training programs. *Journal of Education Policy*, 35(4), 503–528. https://doi.org/10.1080/02680939.2019.1605541.
- SER. (1997). Versterking secundair beroepsonderwijs: Advies Versterking secundair beroepsonderwijs uitgebracht aan de Staatssecretaris van Sociale Zaken en Werkgelegenheid. [Strengthening secondary vocational education: Advice on strengthening secondary vocational education issued to the State Secretary for Social Affairs and Employment]. https://www.ser.nl/-/media/ser/downloads/adviezen/1997/versterking-beroepsonderwijs.pdf

Open Access. This is an open-access article distributed under the terms of the Creative Commons Attribution-NonCommercial 4.0 International License (https://creativecommons.org/licenses/by-nc/4.0/), which permits unrestricted use, distribution, and reproduction in any medium for non-commercial purposes, provided the original author and source are credited, a link to the CC License is provided, and changes – if any – are indicated.

