

Bonoli, Lorenzo; Gonon, Philipp

### Article

## Challenges, future and policy orientations: The 1960s-1970s as decisive years for Swiss vocational education and training

International Journal for Research in Vocational Education and Training (IJRVET)

### Provided in Cooperation with:

European Research Network in Vocational Education and Training (VETNET), European Educational Research Association

*Suggested Citation:* Bonoli, Lorenzo; Gonon, Philipp (2023) : Challenges, future and policy orientations: The 1960s-1970s as decisive years for Swiss vocational education and training, International Journal for Research in Vocational Education and Training (IJRVET), ISSN 2197-8646, European Research Network in Vocational Education and Training (VETNET), European Educational Research Association, Bremen, Vol. 10, Iss. 3, pp. 340-360, <https://doi.org/10.13152/IJRVET.10.3.3>

This Version is available at:

<https://hdl.handle.net/10419/280349>

### Standard-Nutzungsbedingungen:

Die Dokumente auf EconStor dürfen zu eigenen wissenschaftlichen Zwecken und zum Privatgebrauch gespeichert und kopiert werden.

Sie dürfen die Dokumente nicht für öffentliche oder kommerzielle Zwecke vervielfältigen, öffentlich ausstellen, öffentlich zugänglich machen, vertreiben oder anderweitig nutzen.

Sofern die Verfasser die Dokumente unter Open-Content-Lizenzen (insbesondere CC-Lizenzen) zur Verfügung gestellt haben sollten, gelten abweichend von diesen Nutzungsbedingungen die in der dort genannten Lizenz gewährten Nutzungsrechte.

### Terms of use:

*Documents in EconStor may be saved and copied for your personal and scholarly purposes.*

*You are not to copy documents for public or commercial purposes, to exhibit the documents publicly, to make them publicly available on the internet, or to distribute or otherwise use the documents in public.*

*If the documents have been made available under an Open Content Licence (especially Creative Commons Licences), you may exercise further usage rights as specified in the indicated licence.*



<https://creativecommons.org/licenses/by-sa/4.0/>

# Challenges, Future and Policy Orientations: The 1960s–1970s as Decisive Years for Swiss Vocational Education and Training

Lorenzo Bonoli<sup>1\*</sup>, Philipp Gonon<sup>2</sup>

<sup>1</sup>*Swiss Federal University of Vocational Education and Training, Rue de Longemalle 1, 1020  
Renens, Switzerland*

<sup>2</sup>*University of Zurich, Institute of Education, Kantonsschulstrasse 3, CH 8001 Zurich*

Received: 10 January 2023, Accepted: 19 September 2023

## Abstract

**Purpose:** The years 1960-1970 were decisive years in the development of Swiss vocational education and training (VET). The post-World War II economic boom, technological innovations and the debate concerning equal opportunities and the democratisation of education put the VET system under pressure. Reforms were thus undertaken to increase the attractiveness of the system and to respond to the shortage of qualified workers at the time. At the same time, reforms were adopted increasing the theoretical and general knowledge content of VET and improving the quality of training. The aim of our article is to describe these reforms and to show how they relate to a certain image of the future of society.

**Method:** Our article is based on an analysis of historical documents written between 1962 and 1972 in Switzerland on the subject of VET. These documents will, firstly, be used for a historical reconstruction of the situation and of the major challenges of the time; and secondly, they will be subjected to a discourse analysis in order to identify the main arguments that characterised the public debate at the time.

**Results:** Our article shows how the reforms undertaken take shape on the basis of a certain image of the future of society and of VET held at the time: An image characterised by constant and rapid changes, increasing insecurity, need for adaptation and flexibility, complexification and specialisation of work tasks.

---

\*Corresponding author: [lorenzo.bonoli@hefp.swiss](mailto:lorenzo.bonoli@hefp.swiss)



**Conclusion:** The article will also underline how the responses to the challenges posed by this image of the future will be at the origin of new VET policy orientations that will characterise the evolution of Swiss VET up to the present day: A trend towards *academisation*, with more academic and general content; a trend towards *pedagogisation*, with increased pedagogical attention to curricula and teacher training; *differentiation*, with the creation of new certifications; permeability, with the opening of vocational tracks to higher education; and *"learnerisation"*, with the gradual change of the figure of the apprentice from a "worker" to a "learner". Far from being limited to the evolution of Swiss VET, these five orientations describe movements that recent studies show also at the European level.

**Keywords:** VET, Vocational Education and Training, History of VET System, 1960s and 1970s, Future, Swiss, Policy Orientations

## 1 Introduction

The evolution of vocational education and training (VET) institutions is often characterized as a steady flow of small reforms, some kind of a slow evolution or "incremental change" (Streeck & Thelen, 2005). However, when reading historical reconstructions of national VET systems, we sometimes come across expressions such as "decisive years", "pivotal years" and "turning points". Expressions that emphasize how certain historical periods or even moments appear to be particularly important for the evolution of these systems. Historical institutionalism has recently brought into play the notion of "critical junctures" (Busemeyer & Trampusch, 2012; Mahoney, 2000; Pierson, 2000; Streeck & Thelen, 2005). This notion emphasises the decisive character of a given slot of time for the understanding of the evolution of institutions.

Our paper<sup>1</sup> will concentrate on the period 1960-1970, one of these decisive periods in the development of VET systems in western countries (see e.g., Busemeyer & Trampusch, 2012). During this period, many countries were launching reforms of their VET systems in response to the new socio-economic conditions after the Second World War. This movement of reforms was also at the origin of the first attempts to develop a European VET policy, culminating with the foundation of CEDEFOP in 1975 (cf. CEDEFOP, 2004). This paper, however, will focus on the Swiss case, where these years correspond to the post-war economic boom and the high point of the so-called "educational expansion". Even if several studies have already been able to reconstruct the evolution of the Swiss education system in this period (cf.

---

<sup>1</sup> This paper is based on a research project funded by the Swiss National Science Foundation, PN 100019\_179203. "The Evolution of VET in Switzerland Between Federal Framework and Cantonal Specificities", in which Lorenzo Bonoli, Philipp Gonon, Jackie Vorpe and Lena Freidorfer participated. The outlines of this paper were presented at the Congress « The Future Potential of Vocational Education and Training: Strengthening VET for the Next Generation » 2-4 February 2022, organized at the Swiss Federal University of Vocational Education and Training, online. We thank Thomas Ruoss and Jackie Vorpe for their comments on an earlier draft of the article.

Bonoli & Vorpe, 2022; Büchel, 2018; Criblez, 2001; Gonon, 2018; Gonon & Zehnder, 2016; Zehnder & Gonon, 2017), in-depth analyses of the impact of this period on the development of the Swiss VET system up to the present day are still lacking.

The main aims of our article are threefold. The first aim is to confirm the importance of this historical period for the development of Swiss VET, by identifying debates and concrete measures adopted at that time that still characterise the field today.

The second aim of our article is to analyse in depth these debates and concrete measures in order to better understand how they are rooted in the challenges of the time and to explain the exact conditions of their emergence. This analysis will, on the one hand, pay particular attention to how these debates and concrete measures referred to and were based on a specific representation of the future of society and of VET of the time. On the other hand, our analysis will lead us to identify, within these same debates and concrete measures, five new orientations in VET policy emerging during these years as a response to that representation of the future. As will be seen later, these five orientations are academisation, pedagogisation, differentiation, permeability and, to use a neologism, "learnerisation". While these orientations can be read primarily as reactions to the challenges of the time, they also offer a set of analytical tools to better understand the reforms to come up to the present day.

Trends towards *academisation*, *pedagogisation*, *differentiation* or *permeability* have already been identified in the literature (see Criblez, 2001, 2002; Gonon 2008, 2018). In this respect, the originality of our contribution is therefore an in-depth investigation of the origins of these trends, showing how these VET policy orientations emerge from the debates of the time as interconnected responses to socio-economic challenges linked to a certain image of the future of society and the role of VET: An image characterised by constant and rapid changes, increasing insecurity, need for adaptation, complexification and specialisation of work tasks, plus an increasing need for mobility and flexibility. In addition, our analysis identifies a fifth orientation towards "*learnerisation*", which can be briefly described as the progressive shift of the figure of the apprentice from a *worker* figure to a *learner* figure. This orientation has so far been little addressed<sup>2</sup> but has emerged as an important trend in our research<sup>3</sup>.

Directly related to the definition of these five trends, the third aim of our article is to propose general categories that could contribute to constituting a theoretical frame supporting further research at the international level. In this perspective, these five orientations have to be considered as analytical tools to describe and analyse the evolution of VET systems at the international level. They should be considered in relation to the few existing studies attempting to develop a historical comparative analysis, as for example the vast CEDEFOP project on "future scenarios" of VET in Europe (CEDEFOP, 2020). Even though based on different theoretical and methodological bases, the CEDEFOP studies identify some analogous tendencies

---

<sup>2</sup> With the exception of the studies of Bonoli (2017) and Berner (2019).

<sup>3</sup> Cf. in particular the PhD of Lena Freidorfer (2022), based on the same SNF project as our article.

on the evolution of the European VET system. This convergence of our analysis with the CEDEFOP analysis suggests the possibility of a generalisation of these five tendencies from the Swiss case to a broader international context.

As mentioned above, particular attention will be paid to the "representations of the future" that we find in the sources of the time<sup>4</sup>. An analysis of past reforms and historical trends cannot avoid dealing with this question: Any reform, when proposed, defended and adopted, inevitably refers to a representation of the future, which justifies it and makes it indispensable in the eyes of its proponents. This perspective helps us to better understand the perceived challenges of the time and the expectations regarding the measures proposed. At the same time, this perspective helps us to identify the five orientations mentioned above, which can be considered as interpretative lines rooted in the past, confirmed in the present and opening up towards the future.

In other words, our background questions will be the following: What images does the future take on in the debates of this period in the domain of VET? What measures are proposed and adopted based on these images? Can we identify general orientations in VET policy that guide the adoption of these measures and what impact do these orientations have up to the present day?

## 2 Theoretical and Methodological Approach

In order to find answers to these questions, we set up a research framework based on a *multidimensional* and *systemic* approach, which, on the one hand, focuses its attention on the widest possible range of factors describing the functioning of VET, such as economic, educational, social and political factors, and, on the other hand, refers to a perspective that underlines the articulation of these factors in an interconnected system.

We refer hereby to recent work in the history of Swiss education and VET, which has highlighted the need for an approach that is as broad as possible, taking into consideration not only institutional, but also pedagogical, economic and socio-cultural aspects (Bonoli & Eigenmann, 2021; Bonoli & Gonon, 2022; Criblez, 2001, 2008; Gonon, 2018). At the same time, this approach is further reinforced by a reference to historical institutionalism (cf. Bussemeyer & Trampsuch, 2012; Thelen, 2004), which provides us with a solid theoretical basis for investigating the political-economic logics that characterize the evolution of VET systems as institutions.

---

<sup>4</sup> The study of the "future in the past" is not original to our approach. There is indeed a relatively well-developed stream of studies on the "history of the future", see in particular Hölischer (1999), Graf and Herzog (2016), Seefried (2013), Rehlinghaus and Teichmann (2019). For a recent contribution on the subject of the future of VET in Switzerland from a historical perspective, see Jorns (submitted).

Against this theoretical background, we have developed a two-level methodological approach. Firstly, we carried out a historical reconstruction of the period in question. This involved extensive research in the cantonal and federal archives, where we were able to collect numerous sources: Laws, reports, parliamentary debates, official statistics, specialized publications, press articles, etc<sup>5</sup>. The material collected allowed us to carry out a historical reconstruction with the main aim of describing the socio-economic and political situation of VET in Switzerland during the period in question. Secondly, we subjected these same sources to a discourse analysis (Keller, 2011; Landwehr, 2009). We refer to a very broad notion of discourse which refers to "sets of statements obeying common rules" (Revel, 2009, p. 36). These sets of statements emerge as recurrent formulations or recurrent arguments in communicative practices at a determined moment on determined issues, reflecting what we might call different "orders of discourse", to use Foucault's formula (Foucault, 1971). This perspective will lead us to highlight the way in which *public debates* – understood as the whole range of public language productions available at a given time – spoke about VET and to identify the most frequently recurrent arguments used by the different actors. The five orientations highlighted in our introduction emerge from this discourse analysis. They constitute recurrent arguments regularly appearing in the public debates, referred to by different actors in the domain of Swiss VET, and guiding VET policies.

Our discourse analysis perspective also allows us to explain the way in which we consider the images of the future at the time. What we are going to analyse are "discourses" that propose predictions about the future evolution of society and the adaptations that VET should adopt. 'Future' in our analysis therefore refers to certain discursive formulations, which are recognised by the use of the future verb tense or by the temporal location of the object of discourse successive to its discursive production.

We will not primarily consider the future forecast in terms of its adequacy to the reality as it may have developed in later years (see Beckert, 2016). We will remain at the level of discourse and assess the extent to which this or that forecast has influenced other discourses: In other words, the extent to which this or that image of the future is present and generalised in the discourses around 1960-1970 and the extent to which this or that future forecast marks the discourses up to the present day. However, we will pay particular attention to a specific type of discursive production, i.e., texts produced in the framework of legislative processes, in particular policy papers involved in the process of the definition of laws or regulations, and the resulting laws or regulation texts. This kind of text allows us to go beyond the limits of a strict discourse analysis to consider the effects of discourses on the adoption of concrete

---

<sup>5</sup> Our analysis is based on a set of sources collected in the frame of the research project "The evolution of VET in Switzerland" (see footnote 1). In this context, we have established a large corpus of texts on VET in Switzerland, written between 1950 and 1975, concerning the general national debate as well as the situation and the debate in the cantons of Zürich, Geneva and Ticino. The corpus includes official documents (laws, regulations, ordinances, government messages, parliamentary reports, parliamentary debates, statistics, etc.), specialised publications (specialised journals, scientific publications, reports of professional associations or trade unions, etc.), press articles (in particular from the *Neue Zürcher Zeitung*, *Corriere del Ticino* and *Journal de Genève*), and other archive documents (internal circulars, administrative letters, handwritten notes, etc.).

legislative measures. It is at this level that discourses show a concrete effect on real practices, to the extent that these particular discursive productions (policy papers, laws or regulation texts) have a direct impact on concrete VET policy decisions.

In this respect, we can notice how all policy papers concerning reforms or improvements to existing structures contain a "future" dimension, insofar as any reform prefigures new arrangements that are not yet in force. From a discursive point of view, it is particularly interesting to note that the explicit reference to a future helps to ensure a certain discursive efficacy to these positions, which can thus be based on a kind of "anticipated objectivity" of what society will be like. The reference to the future thus becomes a form of rhetorical justification to support the desire for change on the part of this or that actor, by accentuating its necessity and urgency. In other words, it is more discursively effective to defend an idea by linking it to a future that is considered "certain", than by motivating it in relation to contemporary individual interests. At the same time, the reference to the future often functions as the starting point of the debate, in which it is ensured that a common vision of the issues at stake is shared, even though the successive proposals for reform may differ. It is therefore not surprising that the image of the future of society was in our sources relatively uniform among the various actors at the time. The differences emerge more in the consequences to be drawn from this common vision.

### **3 VET in the Context of the Economic Boom, Technological Development and Educational Expansion**

On the basis of a first analysis of the sources collected, we were able to establish a historical reconstruction of the situation at the time, which highlights three phenomena of particular relevance to our argument. The 1960s-1970s were years of "economic boom", "technological development" and "educational expansion" in Switzerland. On the one hand, Switzerland, like most European countries, experienced in this period an economic boom, with an impressive technological development, which was reflected in a very rapid growth of its gross domestic product and in a very high demand for skilled and unskilled labour (cf. Halbeisen et al., 2021). This new socio-economic situation was also perceived in the VET debate. Paul Sommerhalder, VET school inspector and influential voice, underlines e.g. the technological evolution in these words:

*The most striking features of our time are dynamism and upheaval, in all areas of life. Science is influencing technology and technology is reshaping the world, ruthlessly doing away with traditional ways of thinking, working and living. (Sommerhalder, 1970, p. 5)*

This image of a period of great technological change, which is disrupting not only the world of work but also the daily lives of citizens, will profoundly influence the images of the future

of society, on which proposals for reform of the education system are based in order to meet the new challenges<sup>6</sup>.

On the education side, this period was also marked by an extensive development of the whole educational domain, with a prolongation of compulsory schooling, an increase in the average number of years of education, an expansion of the offer of education at all levels (from kindergarten to higher education) and an opening up of upper secondary education and higher education to a wider population (cf. the notion of 'democratisation' of education) (Criblez, 2001; Criblez & Magnin, 2001).

In this context of economic boom, technological evolution and educational expansion, VET was under particular pressure to reform in order to contribute to economic growth by improving the general level of qualifications and to be in touch with contemporary educational and cultural aspirations of the population. More specifically, VET had to face three main challenges (see Bonoli & Vorpe, 2022). The first challenge, from 1950 onwards, was the high demand for a skilled workforce in connection with the economic development. So, VET had to relaunch itself and to improve its attractiveness in order to respond to the shortage of qualified workers and stay abreast of the competition from baccalaureate schools. The second challenge was the increasing complexity of the qualifications required. Expectations concerning workers' knowledge and skills were increasing. The discourses of the time spoke of the "intellectualisation of professions". This expression underlined the necessity for those in all kinds of occupation to possess more theoretical and general knowledge. The third challenge manifested itself a little later from the 1960s onwards and consisted in a widespread social demand for better equality of opportunities and social justice. We are in the period where the movement of the "democratisation of education" gained momentum. In relation to this third challenge, we also have to mention the rise among young people of new educational and social expectations, which grew from the end of the 1960s. These new expectations culminated in protests by apprentices in cities like Basel, Geneva, Bern and Zurich (Eigenmann & Geiss, 2015), and provoked reactions among VET policy makers (Tabin, 1989), reactions aimed at preventing a legitimisation crisis of VET and avoiding a shortage of qualified labour, (Gonon, 2017).

These three challenges had to be tackled in order to keep VET attractive, abreast of technological and economic changes and responsive to social inclusiveness. In other words, in order to avoid a crisis of acceptance, future VET would need to develop a positive image for young people, society and the economy.

These challenges offer us a first clue from which to describe the image of the future at that time. A challenge always implies a projection towards the future of possible actions and requires new answers, as the old solutions no longer work. These three challenges also bring

---

<sup>6</sup> Cf. Stettler (1994) for a general description of images of the future in Switzerland in the 1950s. These images are widely found in representations of the future in Europe, as in the analyses of the situation in West Germany and France by Kellershohn (2022).



us back to three general aims of VET (cf. Bonoli & Gonon, 2022): A strictly economic aim, that is to meet the need of companies for a qualified workforce; an educational aim, to complete compulsory education and meet the need for cultural upliftment of the population; and finally, a social aim, to integrate the largest number of young people into post-compulsory education with equal access conditions. As we will see, during these decisive years the balance between the weight of these three aims changes progressively.

## 4 The Responses to the Challenges: Four Key Publications

Even though our analysis is based on a broader set of sources<sup>7</sup>, we will focus in the next pages on four core publications at the time, that allow us to describe the forecasts of the future and the measures proposed, summarizing the whole of the debate at the time. These publications were produced by four different key players in Swiss VET, players who have influenced and still influence the debate in the field. Although they come from different actors and reflect different interests, they all contribute to a common discourse, that of the revival of VET in the 1960s and 1970s. These four publications will allow us to show how the five general orientations mentioned in the introduction emerge from the texts of this period and how these same orientations, beyond occasional differences, are widely shared even among actors with different interests.

The first document is the "Federal Council's Message of 1962 presenting the VET Act", that would be voted in 1963. The Swiss Confederation had taken over the general coordination of VET from 1930 with a federal law on VET. In 1962, the Federal Council proposed a revision of that law to Parliament and explained its tenor in a Message before the discussion in the chambers. In Swiss politics, these messages have the task of describing the situation in the field, justifying the need for a new law and explaining the articles in the law one by one. Such a document is therefore a particularly interesting tool for reconstructing the debates of the time and, in particular, for noting the image of the future that they convey.

The second document is the "Report on VET of the Swiss Craft Association" (*Schweizerischer Gewerbeverband* – SGV) written in 1970. The SGV is by far the most influential professional association in Switzerland in the field of VET. Since its foundation in 1880, it has marked all the important moments in the development of Swiss VET, including the adoption of the first VET law in 1930, which was largely based on a draft proposed by the association. The association's influence was important also in the 1960s and 1970s. With this report, the SGV tried to influence the political and public debate in order to relaunch VET, which was seen as being in crisis at that time.

The third document is a report, "Proposals for improving VET", from the Federation of Swiss Trade Unions (*Schweizerischer Gewerkschaftsbund* – SGB), written in 1971. Even though

---

<sup>7</sup> See footnote 5.

unions play a comparatively lesser role in the development of VET in Switzerland, compared to other countries (Emmenegger et al., 2018), they can nevertheless be considered as important actors of the domain. They took part in expert commissions and in parliamentary debates and their policy papers contributed to animating the public debate on VET. We will see how some ideas formulated in the SGB report will influence the further development of the system.

The fourth document is the "Final Report on the work of the Federal Expert Commission for the Improvement of Vocational Apprenticeships", the so-called "Grübel Commission", named after the Director of the Federal office for industry, crafts and labour (*Bundesamt für Industrie, Gewerbe und Arbeit – BIGA*) Alfred Grübel, written in 1972. In the Swiss policy making procedure, extra-parliamentary expert commissions play an important role. They bring together representatives of a wide range of interests covering all political sensitivities and sectors of activities. They normally aim to find compromise positions that can achieve broad political support on which new laws can be built and which reduce the risks of blockage in the parliamentary debates (Kriesi, 1995; Vatter, 2014). The Grübel Commission was set up in 1969 by the Minister of the Federal Department of Economic Affairs. It was composed of some twenty experts representing the Confederation, the cantons, employers, trade unions and the education sector. The stances taken by this commission strongly influenced the political and public debate at the time and finally the revision of the 1963 law, that would lead to a new law in 1978.

#### 4.1 The Government Message of 1962

The government message of 1962 presenting a new Vocational Training Act sets the general framework for the debates at the time. This document outlines the expected future of VET and the challenges that the field will need to address. It then proposes concrete measures in a draft law that will be accepted in parliament in 1963<sup>8</sup>. This kind of document reflects broad discussion at a pre-parliamentary level and the search for compromise between different interests, in order to arrive at the formulation of a draft law that can be supported in parliament. Thus, it is of interest to see on which points a common ground was worked out.

At the centre of the vision of the expected future, we find the "unceasing technical change" (Bundesrat, 1962, p. 869) that Swiss society and in particular the economy was experiencing at that time: The shift of activities to the secondary and tertiary sectors, the development of new forms of production marked by mechanisation and automation, which in turn give rise to new professions. These are new occupations with broader qualification requirements, which reflect the new production requirements, because "the growth of automation will create a strong demand for skilled labour, as the construction, manufacture, adjustment and repair of automata require intelligent and carefully trained specialists" (Bundesrat, 1962, p. 872).

---

<sup>8</sup> Cf. Gonon and Freidorfer (2022) for a more profound analysis of the issues around the 1963 VET Law.

At the same time, the need for a new professional figure is clearly emerging: The "intermediate manager": "The uninterrupted progression in production increases the need for technically trained personnel capable of planning, building, organizing work, monitoring deadlines and calculating the wages of pieceworkers" (Bundesrat, 1962, p. 871).

A further requirement aimed at catching up with the constant technical evolution was also formulated. The 1962 message underlines the tendency for people to change jobs and occupations more often and the need, even for qualified workers, in order to be up to date, to engage in "further training".

Faced with these challenges, VET would need to provide broad basic training and avoid excessive specialisation. Initial VET should give the apprentice "the starting point for his or her professional advancement" (Bundesrat, 1962, p. 873), a training which is not limited to imparting "the skills and knowledge indispensable for the exercise of their profession, but must also form their character and personality", which are the basic conditions for "facilitating each person's social advancement" (Bundesrat, 1962, p. 874).

Last but not least, VET must be able to attract the largest possible number of young people in order to meet the need for skilled labour, also through an "efficient and modern system" of education and training, which is essential in order to "make use of the reserves of labour" (Bundesrat, 1962, p. 874) which the Swiss economy particularly needed.

This description of the expected future and the challenges for VET was largely shared during the 1960s and the responses of the 1963 law were largely supported by economic and political milieux<sup>9</sup>. Nevertheless, the law of 1963 rapidly emerged as insufficient and outdated shortly after it came into force. Only five years after the vote in parliament, Paul Sommerhalder (already quoted above) stated:

*The new law of 1963 is a child of the economic boom, when people wanted to profit from good business and hardly had time for training issues. So again, the conditions for a progressist law were not the best. Therefore, we are not surprised if the new law brought nothing new! (Sommerhalder, 1968, p. 227)*

The debates on VET continued regarding the future and its challenges. The texts that we will present in the following paragraphs are part of these same debates and are directly involved in the discussions concerning the revision of the 1963 law, which led to the new law of 1978.

---

<sup>9</sup> This support became explicit in the referendum against the new federal law project. In fact, the VET act of 1963 was subject to a referendum against a rather marginal article concerning the designation of "technical engineers" (Gonon, 2018; Wettstein, 2020). The Swiss population largely accepted the law with 69% of the votes.

#### 4.2 Swiss Craft Association (SGV) and Federation of Swiss Trade Unions (SGB): Common and Contrasting Visions

The Swiss Craft Association (SGV) took a stand in a report in 1970. One year later, the Federation of Swiss Trade Unions (SGB) also produced a report with its "Proposal for the improvement of VET".

The imagined future as it emerges from the two documents, documents which reflected the positions of two interest-specific actors, is – perhaps surprisingly - not that far from the image already depicted by the government Message of 1962. The future of VET and of society in general is characterized by constant technological change provoking insecurity and a need for adaptation. The two reports also highlight trends toward specialisation and complexification of qualifications, requiring more theoretical and general knowledge. The SGB report also mentions the "increase in the influx of information" (Schweizerischer Gewerkschaftsbund [SGB], 1971, p. 3) and underlines the need for adaptability and mobility for individuals. While the general description of the future and the challenges it brings with it seems relatively similar in the two reports, differences emerge when analysing the priority of the challenges and the responses to be given. For the SGV, the major challenge was to be able to meet the growing need of Swiss companies for skilled labour, a need that could only be met by improving the quality and attractiveness of VET. For the SGB, the major challenge was to ensure that all young people had the necessary skills and general culture to enter and remain in the labour market and to participate as responsible citizens in society. This also meant improving VET, but with the emphasis on access to quality education and training for all.

#### 4.3 The Two Most Contested Issues: Dual Model and Differentiation Projects

However, these two actors were openly opposed on two themes, which will largely characterize the debate of the time: The defence of the dual model and the promotion of "differentiation" of VET diplomas. For the SGV, it was clear that the revival of VET must be based on the dual apprenticeship:

*The Swiss VET system with its emphasis on dual apprenticeship has fundamentally proven itself. Even with a view to the future development of VET, there are many advantages to maintaining the focus on company-based apprenticeships. (Schweizerischer Gewerbeverband [SGV], 1970, p. 12)*

Even though the support for the dual model was absolute, the SGV recognizes the need to "modernise" it: "The SGV's commitment to dual apprenticeship therefore presupposes that there must be a constant willingness to make system-compliant adjustments to economic, social and technical developments and to the training needs of young people" (SGV, 1970, p. 13).

In more detail, this modernisation should place more emphasis on theoretical and general education. This would of course imply an increase in teaching hours in vocational schools. But not only that. In order to avoid a kind of a loss of control on the part of the professional associations over the contents of training, the SGV proposed developing what were then called "introduction courses" (branch courses, today). Courses, under the responsibility of the professional associations, where theoretical and general knowledge related to the profession would be transmitted.

In contrast to the SGV, the SGB had a more nuanced position towards the dual model. On the one hand, the dual model was strongly criticised. Dual apprenticeship was no longer appropriate to respond to future challenges. Full-time vocational schools were more suitable: "The current system of master apprenticeship in its present form no longer meets modern requirements. [...] Basic training must therefore take place in actual full-time vocational schools or training workshops" (SGB, 1971, p. 6).

Among the arguments brought up against the dual model, we find the risk of exploitation and poor training and the impossibility for some companies to train apprentices appropriately due to increasing specialisation. However, the SGB report seems to be aware of its limited political influence on mainstream VET policies and of the difficulty of giving up a form of training that is deeply rooted in Swiss traditions. So, the report opens the way to a compromise: If the dual model had to be maintained, it should be strongly reformed with better working and learning conditions for apprentices, and a strong increase in the role of school, that is with more school teaching and with a broader education, including more theoretical and general knowledge. This is partly in line with the SGV's call for a reform of dual apprenticeship with a stronger emphasis on theoretical and general knowledge.

The second point where a contrast appears is the project of differentiation of VET diplomas. The SGV supported the idea of creating three types of certificates for initial VET. One, with higher requirements, for an elite of young people (the *Berufsmittelschule* [BMS]); a second, the "normal" certificate; and a third certificate with lower requirements for young people with a lower profile (*Anlehre*). The aim of this differentiation was, on the one hand, to improve the quality of teaching in vocational schools by reducing the heterogeneity of the classes, and on the other hand, to increase the attractiveness of VET for young people with stronger academic profiles who would otherwise choose general education programmes.

The SGB opposed this project of differentiation. On the one hand it conceded the interest of creating a new program (the BMS) with broader theoretical and general teaching: "The only purpose of the BMS is to train the lacking middle and lower cadre more quickly. In this sense, it cannot be denied a certain justification" (SGB, 1971, p. 7). On the other hand, it underlined the overall goal of reform in the domain as the improved quality of VET for all young people and not only for an elite: "The focus of reforms must be on improving training for the majority of apprentices" (SGB, 1971, p. 7). The SGB thus underlined the necessity to

improve the conditions of work and training for all apprentices by recognizing their status, not only as young workers, but also as young persons in education – as learners–, who should be compared not with other workers but with baccalaureate school students. In this perspective, it asks for apprentices for more general education, more holidays, shorter working hours and sports classes.

These two reports also mention a series of other less controversial points which concern a general improvement of the field: In particular, better organisation and planning of training, better preparation of teachers and trainers, better integration of VET into the education system with better permeability, and finally, clear support for VET research to ensure monitoring and innovation in the field.

#### 4.4 From the Debates to the Concrete Measures Proposed by the Grübel Commission

The public debate on the relaunching of the VET reaches a first formulation of concrete measures in the work of the Grübel Commission. This commission was set up in 1969 to "draw up proposals for the improvement of dual apprenticeship", so that it could "by means of various measures become attractive again and position itself as a real alternative to the baccalaureate schools" (Expertenkommission, 1972, p. 1).

With these premises, it is not surprising that the commission agreed on the importance of safeguarding dual apprenticeship: "By a large majority, the commission considers the master apprenticeship to be the most suitable form for our initial training" (Expertenkommission, 1972, p. 1). However, the commission also agreed that reforms were needed to update this model.

The commission proposed 16 measures. Some of these were oriented to increasing the theoretical and general contents in VET classes, with more hours at school and the development of "introduction courses" under the controls of professional associations (see measures A; B5, B3, B10). Other measures aimed at the improvement of the pedagogical quality of the training through better training programs, didactic handbooks, reform of the exams and better training for teachers and trainers (B1, B2, B3, B9, B10, B11, B13, B14). Another group of measures was centred on the improvement of the learning conditions of apprenticeship, on a better control of working conditions, on the introduction of sports classes, on the broadening of the general contents and on a better preparation for further education or for entering higher education (A, B6, B7, B8). Finally, some measures recommended a greater differentiation of the curricula, with the creation of three different certificates: An elite programme (*BMS*), a "normal" certificate, and a program with low exigencies (*Anlehre*) (Measures A, C.).

All in all, the Grübel Commission took up most of the SGV's proposals, in particular the centrality of the dual model and differentiation projects, while further developing the aspects

related to the improvement of the pedagogical quality of training. The positions of the SGB are only partly reflected in its report. Especially on the two contested issues presented above, the commission adhered to the SGV's positions. However, a number of the proposed measures were in fact also broadly supported by the SGB: In particular the measures concerning more general knowledge, better pedagogical conditions of training and better consideration of the interests of young people in training as "learners". In addition, the idea of qualitative apprenticeship with more general knowledge for all young people, which was a main demand emerging from the SGB report, has progressively spread in the public debate up to the present day, influencing successive reforms.

The issue of differentiation remained a highly controversial issue up to the debates around the new law of 1978. It was because of the introduction of a training programme for young people with a lower profile (*Anlehre*) that the trade unions launched a referendum against the law. The trade unions feared that this new certificate was "not primarily intended to accompany the socially and educationally weaker young people to a simple initial vocational qualification, but that employers [were] aiming at a generalised wage dumping" (Sigerist, 2008, p. 292). In the decisive vote, however, the referendum was rejected by the voters. The new federal law on VET was accepted with 58% of the votes, confirming the line taken by the government and before it by the Grübel Commission. This vote also confirms the influence of the SGV on Swiss VET policy.

#### 4.5 Summing Up: Five Major Orientations Running Through the Totality of the Debates

If we take a step back and look at the four publications in the context of the totality of the debates at the time, we can identify five new VET policy orientations, which are particularly salient in these texts, but which also run through all our sources. From a historical perspective, they can be considered as general answers proposed at that time to the challenges of the future of society and VET. From a theoretical perspective, these orientations must be considered as analytical tools that help us to better understand debates and measures taken in the period 1960-1970 as well as to better describe the evolution of the successive debates and reforms, up to the present day.

The first orientation that clearly emerges from our sources and that finds explicit references in the four publications presented above is an orientation towards *academisation*. From the 1960s onwards, the debates of the time regularly highlight the need for VET to expand and provide access to more theoretical and general knowledge content in order to meet the new qualification requirements of the labour market and the population's desire for more pathways into higher education. This is reflected in a trend towards more school hours in vocational school, the introduction of branch courses, the expansion of optional courses, the

establishment of new fully developed programs with more general knowledge such as the BMS certificate and later the federal vocational baccalaureate.

The second is an orientation towards *pedagogisation* of VET. From the 1960s onwards we witness greater attention paid in debates to the pedagogical dimension of VET, which materialized in the expansion and improvement of the training of teachers and trainers, in the revision of training regulations and of examination modalities, in the setting up of didactic tools to facilitate the transmission of competences, and in a desire for the standardisation of practices.

The third orientation is towards *differentiation*. In order to better respond to the demands of the market and society, the need for a broader and more differentiated range of training programs also emerges from the debates of the time. This differentiation will progressively occur with, on the one hand, the introduction of three different levels of initial vocational training, and, on the other hand, the development of higher VET and the opening up of VET to tertiary education.

The fourth orientation is towards more *permeability* in the whole system. It was from the 1960s onwards that the notions of lifelong learning, mobility and flexibility entered the debates on the education system. They culminated in the term of 'permeability', which initially referred above all to the need to be flexible, to stay up to date, to change profession, and later became also synonymous with the possibility of changing pathways in the education system and pursuing training or education at a higher level. The term also reflects the awareness of the need to conceive of educational pathways as something that does not stop after a first certificate but continues throughout a professional career. Also, here we can mention some concrete measures, in particular the opening up of VET to tertiary education and the development of continuing education.

Finally, the fifth orientation is towards what we might call the "*learnerisation*" of apprentices. By means of this neologism, we wish to designate the greater attention emerging from the debates of the time on the figure of the "apprentice". This attention progressively leads to a modification of the perception of the apprentice from a "worker" to a "learner". This implies, on the one hand, greater attention to the educational dimensions of training with improvement in the whole pedagogical setting of apprenticeship, increased protection against abuse and better control over the quality of training, and on the other hand a rapprochement of apprentices with learners in general schools at secondary II level (in particular baccalaureate schools), with, for example, an increase in the number of holidays, the introduction of sports classes in vocational schools, an increase in general education content and the opening up of educational pathways to higher education at tertiary level, and now even to university.



## 5 Conclusion

If we look back from today at the representations of the future at the time in question, we can highlight several interesting points. First of all, although the economic and social situation is profoundly different today, it is interesting to note how the future challenges evoked in the 1960s-1970s are not completely different from the challenges we identify today for VET: Notions of increasing complexity, instability, rapid economic and social changes, and increasing technological evolution are still largely present today in the future perspectives for VET. The consequences for individuals are also similar: The need to adapt, to be flexible, to enter continuing education (cf. lifelong learning), on the one hand, and on the other hand, the need for more transversal competences, soft skills and general knowledge<sup>10</sup>. In such a context, VET is called upon, today as then, to improve its quality, to increase the number of well-trained people and to ensure social and professional integration for as many young people as possible.

Secondly, the decisions and measures put in place in the 1970s are still central to the Swiss VET system today: The priority given to dual apprenticeship, a certain balance between vocational schooling and workplace practice, branch courses, the presence of three certificates for IVET, the pedagogical preparation of teachers and trainers, the existence of teaching aids for in-company training, the promotion of VET research. This confirms the importance of this "decisive period" in the evolution of the Swiss education system.

Thirdly, these same decisions and measures were taken following the five orientations presented above, that emerged in the 1960s-1970s and that constitute to some extent the driving forces behind the development of Swiss VET over the last 70 years. The current debates around "Vision 2030"<sup>11</sup> lead us to assume that they will also be the driving forces in the future.

With regard to these five VET policy orientations, we can notice how they address mainly educational and social issues. This clearly reflects a rebalancing of the aims of Swiss VET. As Bonoli and Gonon (2022) show, while economic aims linked to the training of skilled labour remain predominant, from the 1960s/1970s onwards, social aims (i.e., integration and social mobility) and educational aims (citizens' education and openness to higher education), have gained importance. It is undoubtedly this broadening of the aims attributed to Swiss VET that ensures that it is not only widely supported by all political forces, but that it is also still considered as one of the essential tools of public policies to meet the challenges of the future, and thus addressing economic, educational and social issues.

If we now adopt a more general point of view going beyond the specificities of the Swiss case and consider the international debate, we can highlight the way in which our analysis helps to better understand how changes occur in highly complex institutions such as VET

---

<sup>10</sup>This can also be seen today in the framework of "Vision 2030": An initiative launched by the Swiss government and the most important actors in the field of VET to prepare and reform Swiss VET for future challenges, cf. <https://www.sbf.admin.ch/sbf/de/home/bildung/berufsbildungssteuerung-und--politik/projekte-und-initiativen/berufsbildung-2030.html> (03.05.2023).

<sup>11</sup>See previous footnote.

systems. Our article shows that even though the future (especially technological) seemed to demand a revolution in the socio-professional reality of the time, the measures adopted were anything but revolutionary. They were progressive adjustments, which, confirming the idea of "incremental change", adapted, corrected and complemented structures that already existed. Moreover, our analysis, by combining the idea of "critical junctures" with the idea of general orientations, underlines the fact that, if indeed, at specific moments in a country's history, windows of opportunity may open, this does not mean that revolutions are possible, on the contrary, these windows open onto paths of change largely conditioned by existing structures.

Finally, by identifying five general orientations in the evolution of the Swiss system, our article proposes a set of theoretical tools to describe the evolution of VET systems also in other countries in a comparative perspective. These five orientations can for instance help us to better understand the general international movement that took off in the 2000s with the intention to "modernise" apprenticeship and VET in general, insofar as the reforms proposed in the various countries follow analogous orientations (see CEDEFOP, 2009). In the same perspective, if we consider the vast project recently carried out by CEDEFOP on the "future of VET" (CEDEFOP, 2020), we can notice how some similar orientations can also be identified in the evolution of VET systems in Europe over the last 30 years. In particular, the report notes a certain "academic drift" (cf. CEDEFOP, 2020, p. 71), which tends to broaden the contents of VET and bring it closer to general education provision; furthermore a "pluralistic drift" (cf. CEDEFOP, 2020, p. 73) of VET provisions, which covers both an increase in the range of programmes as well as a better integration and permeability of the different educational offers of VET or general education. More in-depth studies remain to be done in this perspective: The *historical* comparative research on VET has so far been very poorly developed.

## Acknowledgement

This paper is based on a research project funded by the Swiss National Science Foundation, PN 100019\_179203. "L'évolution de la formation professionnelle en Suisse entre cadre fédéral et spécificités cantonales", in which Lorenzo Bonoli, Philipp Gonon, Jackie Vorpe and Lena Freidorfer participated.

## Ethics Statement

The research for this article was based on written documents available to the public in Swiss libraries and archives. Our research did not involve the direct participation of "human subjects".

## Quoted Sources

- Bundesrat. (1962). Botschaft des Bundesrates an die Bundesversammlung zum Entwurf eines Bundesgesetzes über die Berufsbildung (vom 28. September 1962). Bundesblatt, 44, 885–980.
- Expertenkommission. (1972). *Schlussbericht über die Arbeiten der Eidgenössischen Expertenkommission für die Verbesserung der Berufslehre (Grübel-Kommission)*. Bundesamt für Industrie, Gewerbe und Arbeit.
- Schweizerischer Gewerbeverband (SGV). (1970). Berufsbildungsbericht des Schweizerischen Gewerbeverbandes. *Gewerbliche Rundschau*, 4, 1–47.
- Schweizerischer Gewerkschaftsbund (SGB). (1971). Vorschläge zur Verbesserung der Berufsbildung. *Separatdruck aus "Gewerkschaftliche Rundschau" (2)*, 1–6.
- Sommerhalder, P. (1968). Berufsbildung im Umbruch. *Schweizerische Blätter für Gewerbeunterricht*, 10, 225–230.
- Sommerhalder, P. (1970). Berufsbildung im Umbruch: 1. Aktuelle Tendenzen; 2. Berufsmittelschule. *Schriftenreihe des Instituts für Bildungsforschung und Berufspädagogik des Kantons Zürich*, 3, 1–56.

## Literature

- Beckert, J. (2016) *Imagined futures. fictional expectations and capitalism dynamics*. Harvard University Press.
- Berner, E. (2019). Der "Lehrling": Qualifizierung einer Kategorie im schweizerischen Rechtsdiskurs (1870–1930). In C. Imdorf, R. Leemann & P. Gonon (Eds.), *Bildung und Konventionen* (pp. 311–339). Springer. <https://doi.org/10.33057/chronos.1713>
- Bonoli, L. (2017). An ambiguous identity: The figure of the apprentice from the XIX century up to today in Switzerland. In F. Marhuenda (Ed.), *Vocational education beyond skill formation. VET between civic, industrial and market tensions* (pp. 31–49). Peter Lang. <https://doi.org/10.1556/063.2021.00062>
- Bonoli, L., & Eigenmann, P. (2021). Komplexität, Spannungsfelder und Kompromisse. Eine Relektüre der Geschichte der Berufsbildung in der Schweiz. In S. Dernbach-Stolz, P. Eigenmann, C. Kamm & S. Kessler (Eds.), *Transformationen von Arbeit, Beruf und Bildung in internationaler Betrachtung* (pp. 41–60). Springer. [https://doi.org/10.1007/978-3-658-32682-1\\_3](https://doi.org/10.1007/978-3-658-32682-1_3)
- Bonoli, L., & Gonon, P. (2022). The evolution of VET systems as a combination of economic, social and educational aims. The case of Swiss VET. *Hungarian Education Research Journal*, 12(3), 1–12. <http://doi.org/10.1556/063.2021.00062>
- Bonoli, L., & Vorpe, J. (2022). Swiss VET between national framework and cantonal autonomy: A historical perspective. *Education Sciences*, 12(114), 1–19. <https://doi.org/10.3390/educsci12020114>

- Büchel, K. (2018). *Duale Berufsbildung als Teil der 'Bildungsexpansion': der Kanton Luzern als Beispiel für die expansive Entwicklung der dualen Berufsbildung von 1954 bis 1980*. Universität Zürich [doctoral dissertation]. <https://doi.org/10.5167/uzh-156966>
- Busemeyer, M., & Trampusch, C. (2012). *The political economy of collective skill Formation*. Oxford University press.
- CEDEFOP. (2004). *Formation professionnelle. Une histoire de la formation professionnelle en Europe. De la divergence à la convergence, Revue Européenne, no. 32*. CEDEFOP. <https://www.cedefop.europa.eu/files/32-fr.pdf>
- CEDEFOP. (2009). *Modernising vocational education and training - Background report, Vol. 1/2*. Publications Office of the European Union. [https://www.cedefop.europa.eu/files/3050\\_II\\_en.pdf](https://www.cedefop.europa.eu/files/3050_II_en.pdf)
- CEDEFOP. (2020). *Vocational education and training in Europe, 1995-2035. Scenarios for european vocational education and training in the 21st century*. Publications Office of the European Union. [https://www.cedefop.europa.eu/files/3083\\_en.pdf](https://www.cedefop.europa.eu/files/3083_en.pdf)
- Criblez, L., & Magnin, C. (2001). Editorial: Die Bildungsexpansion in der Schweiz der 1960er- und 1970er Jahre. *Schweizerische Zeitschrift für Bildungswissenschaften*, 23, 7–11.
- Criblez, L. (2001). Bildungsexpansion durch Systemdifferenzierung — am Beispiel der Sekundarstufe II in den 1960er- und 1970er-Jahren. *Schweizerische Zeitschrift für Bildungswissenschaften*, 23, 95–118.
- Criblez, L. (2002). Gymnasium und Berufsschule. Zur Dynamisierung des Verhältnisses durch die Bildungsexpansion seit 1950, *Traverse*, 9, 29–40.
- Criblez, L. (2008). *Bildungsraum Schweiz. Historische Entwicklung und aktuelle Herausforderungen*. Haupt Verlag.
- Eigenmann, P., & Geiss, M. (2015). There is no outside to the system: Paternalism and protest in Swiss vocational education and training, 1950-1980. In E. Berner & P. Gonon (Eds.), *History of VET in Europe – Cases, concepts and challenges* (pp. 403–428). Peter Lang. <https://doi.org/10.3726/978-3-0343-2354-3>
- Foucault, M. (1971). *L'ordre du discours*. Gallimard
- Freidorfer, L. (2022). *Vom "Lehrling" zum "Lernenden" – Zur Wahrnehmung Jugendlicher in Ausbildung im Zuge der Transformation der beruflichen Bildung in den Jahren von 1950 bis 1970*. Universität Zürich [doctoral dissertation].
- Gonon, P. (2008). Education for industry – Employability avant la lettre. In P. Gonon, K. Kraus, J. Oelkers & S. Stolz (Eds.), *Work, education and employability* (pp. 241–257). Lang. <https://doi.org/10.25656/01:19466>
- Gonon, P. (2017). Quality doubts as a driver for Vocational education and training (VET) reforms – Switzerland's way to a highly regarded apprenticeship system. In Pilz, M. (Ed.), *Vocational education and training in times of economic crisis* (pp. 341–354). Springer. [https://doi.org/10.1007/978-3-319-47856-2\\_18](https://doi.org/10.1007/978-3-319-47856-2_18)
- Gonon, P. (2018). L'expansion de la formation professionnelle: Le cadre législatif au centre des réformes de la formation professionnelle. In L. Bonoli, J.-L. Berger & N. Lamamra (Eds.), *Enjeux de la formation professionnelle en Suisse* (pp. 33–52). Seismo.
- Gonon, P., & Freidorfer, L. (2022). Education and training regimes within the Swiss vocational education and training system. A comparison of the cantons of Geneva, Ticino, and Zurich in the context of educational expansion. *Education Sciences*, 12(1). <https://doi.org/10.3390/educsci12010020>

- Gonon, P., & Zehnder, L. (2016). Die Berufsbildung der Schweiz als permanenter Kompromissbildungsprozess. In J. Seifried, S. Seeber & B. Ziegler (Eds.), *Jahrbuch der berufs- und wirtschaftspädagogischen Forschung 2016* (pp. 43–58). Verlag Barbara Budrich. <https://doi.org/10.25656/01:12703>
- Graf, R., & Herzog, B. (2016). Von der Geschichte der Zukunftsvorstellungen zur Geschichte ihrer Generierung. Probleme und Herausforderungen des Zukunftsbezugs im 20. Jahrhundert. *Geschichte und Gesellschaft*, 42, 497–515. [https://zeithistorische-forschungen.de/sites/default/files/medien/material/2013-3/Graf\\_Herzog\\_2016.pdf](https://zeithistorische-forschungen.de/sites/default/files/medien/material/2013-3/Graf_Herzog_2016.pdf)
- Halbeisen, P., Müller, M., & Veyrassat, B. (2021). *Histoire économique de la Suisse au XXème siècle*. Editions Livreo-Alphil.
- Hölscher, L. (1999). *Die Entdeckung der Zukunft*. Wallstein Verlag.
- Jorns, K. (submitted). Reaktive Chronopolitik: Berufsbildung im Dauerzustand defuturierte Zukunft - "Temporalorientierung in politischen Zukunftsvorstellungen im Gesetzgebungsprozess der schweizerischen Berufsbildung". In *Jahrbuch für Historische Bildungsforschung*, 29. Klinkhardt.
- Keller, R. (2011). Diskursforschung. *Eine Einführung für SozialwissenschaftlerInnen*. VS Verlag. <https://doi.org/10.1007/978-3-531-92085-6>
- Kellershohn, J. (2022). *Die Politik der Anpassung. Arbeitswelt und Berufsbildung im Ruhrgebiet 1950-1980*. Böhlau.
- Kriesi, H.-P. (1995). *Le système politique suisse*. Économica.
- Landwehr, A. (2009). *Historische Diskursanalyse*. Campus.
- Mahoney, J. (2000). Path dependency in social history. *Theory and Society*, 29, 507–548. <https://www.jstor.org/stable/3108585>
- Pierson, P. (2000). Increasing return, path dependency and the study of politics. *The American Political Sciences Review*, 94, 251–267. <https://doi.org/10.2307/2586011>
- Rehlinghaus, F., & Teichmann, U. (Eds.). (2019). *Vergangene Zukünfte von Arbeit. Aussichten, Ängsten und Aneignungen im 20. Jahrhundert*. Dietz.
- Revel, J. (2009). *Le vocabulaire de Foucault*. Ellipses.
- Seefried, E. (2013). Steering the future. The emergence of "Western" futures research and its production of expertise, 1950s to early 1970s. *European Journal Futures Research*, 29, 1–12. <https://doi.org/10.1007/s40309-013-0029-y>
- Sigerist, P. (2008). Berufsbildung zwischen Wirtschafts- und Lernförderung. In T. Bauder & F. Osterwalder (Eds.), *75 Jahre eidgenössisches Berufsbildungsgesetz* (pp. 287–310). Hep.
- Stettler, N. (1994). "Die Zukunft ist errechenbar...". In J.-D. Blanc & C. Luchsinger (Eds.), *Achtung: die 50er Jahre! Annäherungen an eine widersprüchliche Zeit* (pp. 95–117). Chronos.
- Streeck, W., & Thelen, K. (2005). Introduction: Institutional change in advanced political economies. In W. Streeck & K. Thelen (Eds.), *Beyond continuity. Institutional change in advanced political economies* (pp. 1–39). Oxford University Press. <https://nbn-resolving.org/urn:nbn:de:0168-ssoar-194981>
- Tabin, J.-P. (1989). Formation Professionnelle en Suisse. Histoire et Actualité. Réalités sociales.
- Thelen, K. (2004). *How institutions evolve: The political economy of skills in Germany, Britain, the United States, and Japan*. Cambridge University Press.
- Vatter, A. (2014). *Das politische System der Schweiz*. Nomos Verlag UTB.
- Wettstein, E. (2020). *Berufsbildung- Entwicklung des Schweizer Systems*. Hep.
- Zehnder, L., & Gonon, P. (2017). Civic and market convention as driving forces of the development of Swiss VET. In F. Marhuenda (Ed.), *Vocational Education beyond Skill Formation: VET between Civic, Industrial and Market Tensions* (pp. 271–292). Peter Lang. <https://doi.org/10.3726/b11500>

## **Biographical Notes**

Lorenzo Bonoli, Dr phil, is Professor at the Swiss University of Vocational Education and Training (SFUVET) in Lausanne and Zollikofen (Bern). After obtaining a PhD in Philosophy at the University of Lausanne, he has been working in the field of VET since 2007 at the SFUVET, where he directs a Master of Sciences in VET and conducts research on systemic issues and the historical development of the Swiss VET system, international comparisons of VET systems, theoretical approaches to VET, VET international cooperation issues, as well as on social science epistemology and discourse analysis.

Philipp Gonon, Dr phil, is Professor of Vocational education and training at the Zurich University, where he taught vocational pedagogy, history and theory of education, quality assurance and program evaluation. From 1986 until 1992 he was research assistant and lecturer at the Institute of Pedagogy of the University of Bern. From 1999 until 2004, he served as a Professor of Further and Continuing Education at the University of Trier in Germany. Since 2004, he has taught at the Zurich University. He is an expert on international comparative education, apprenticeship and work-based learning, the Swiss VET and on the German pedagogue, Georg Kerschensteiner.