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Two waves of academisation of VET in Switzerland: Threat or way forward?

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Abstract

In the development of the Swiss vocational education and training (VET) system we can observe a trend towards 'academisation', based on two movements: on the one hand, an expansion of general knowledge and non-vocational content, and on the other hand, a structural rapprochement of VET streams with higher education. In the 1960s and 1970s, a stronger orientation towards more academic knowledge was seen as necessary to keep VET attractive to intelligent learners. In addition, the opening of pathways to more technical expertise and career paths in higher education was promoted and strengthened in the 1990s in order to cope with technological and economic changes.

The article reconstructs two waves of this academisation, first in the 1970s in terms of content, and then in the 1990s in terms of structures. These two waves led to a successful positioning of VET by creating an institutional transition from VET to higher education. However, academisation as a process remains ambiguous, as it could be seen as a way forward, but also as a threat to the extent that VET weakens its core profile.

Keywords: academisation, Swiss vocational education and training (VET), higher education, vocational middle school, federal vocational baccalaureate, universities of applied sciences

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Introduction

Since their first institutionalisation at the end of the 19th century, vocational education and training (VET) systems have always had to position themselves in relation to general education, even though, in a number of countries VET is part of the education system itself alongside general education (Lauglo, 2005). In Switzerland, there are significant differences between these two streams, making their respective positioning within the education system a major issue in recent decades.

The aim of VET, and in particular of the dual apprenticeship model, which combines work-based and school-based learning, is to impart vocational knowledge and habits as well as specific skills, that can be applied in productive contexts. These practical skills and vocational knowledge are defined by economic actors in cooperation with public authorities. A limited amount of general knowledge content complements the mainly work-based training. On the other hand, general education aims to provide mainly theoretical, general, or academic content in order to continue towards higher education (HE). It is far removed from the concrete needs of the world of work. General knowledge, both in baccalaureate schools and in VET, is usually taught in a classroom context, and is divided into specific subjects, with the overall aim of providing young people with the knowledge base necessary for successful integration into society and further education. However, there is a tension concerning the right balance between general knowledge content and work-related skills in VET, especially in the context of the dual apprenticeship model. In recent decades there has been increasing pressure to include more general (and school-based) knowledge and to open up new pathways in order to make the VET system more permeable with opportunities for transition to higher education. The theme of academisation appears in relation to these questions.

Our article describes how this theme gained momentum in Switzerland in two different waves in the 1960s and in the 1990s. We show that the first wave (1960s) focused on the content of teaching and learning in VET schools and was driven mainly by educational actors based in schools at the upper secondary level. The second wave (1990s) emphasised the orientation and transition from VET to higher education and was driven more by external actors outside VET, such as engineering schools, national education councils, and various thinktanks and globally oriented advisory boards. While this gradual academisation of VET has been based on a broad consensus among the actors involved, the public discourse on academisation has from time to time been much more critical, warning that such a drift is a threat to VET (Janssen, 2024), which risks losing its practical specificity and its closeness to the world of work.[1]

Academisation and academic drift

In the German-speaking context the term 'academisation' today appears to be regular in the public discourse on VET (Ambühl, 2022). This term is often used as a wake-up call. It denounces the risk of devaluing the vocational dimension and criticises an education policy that neglects VET and devotes all its resources to the development of general education. It also points the finger at the decline in enrolments in vocational education, a decline that is also linked to parents' preferences for the baccalaureate option (Deissinger & Gonon, 2016). All these factors have undesirable consequences, as lamented by public figures (Rümelin, 2014), but also by political parties. VET, and in particular the dual model of apprenticeship, is seen as a key factor for economic competitiveness (Strahm, 2010). For this reason, some actors and politicians in Switzerland even argue for limiting the number of learners in the baccalaureate stream in order to strengthen VET (e.g., SVP-Basel, 2015). Alongside these discourses, however, we can also identify another, more discreet but nonetheless important, narrative that advocates broadening the content of general education within VET and bringing it closer to higher education. In order to make VET, and in particular dual apprenticeship, more attractive, more schooling and more general and specific knowledge (acquired in schools or learning centres) are needed to meet the demands of higher education, but also the expectations of the economy and of the learners.

However, aligning VET with academic forms, that is, content and also pathways leading to higher (academic) education, carries the risk of alienation, of turning away from the original objectives of VET as such (Baker, 2014). In contrast to experience-based knowledge and skills, school- and subject-based knowledge appear to be becoming increasingly important. This could lead to a shift away from the world of practical work and an encouragement for VET graduates to pursue roles in higher positions in production and services. This is a concern that has been raised in public debates (Annen & Maier, 2022; particularly Gonon, 2022).

The concept of academisation is less common in the Anglophone debate. The problems associated with this concept are partly addressed by the term 'academic drift'. A recent CEDEFOP report (CEDEFOP, 2020) identifies two general trends in European VET systems: a 'vocational drift' and an 'academic drift'. Vocational drift is evident when the value of VET increases in terms of its appreciation as a form of education and in its role in developing skills for the labour market, as well as in terms of the number of students enrolling in its programmes. Conversely, the phenomenon of 'academic drift' is associated with a decline in the importance of VET and an increased emphasis placed on academic disciplinary knowledge. It is also associated with an increase in the relative number of enrolments in general upper secondary education and

university education and with an 'increasing attractiveness of general and academic education (in terms of public opinion)' (CEDEFOP, 2020, p. 73). The concept of drift, as used in this CEDEFOP report, emphasises the inter-dependence of vocational and academic pathways. In line with the definition provided by Hacker et al. (2015), drift can be defined as a process of balancing institutional change and institutional reproduction. This means that periodically, vocational and academic goals and pathways need to be rebalanced.

Furthermore, some of the concerns associated with this concept are also addressed by the concept of 'over-education' (Grubb & Lazerson, 2003), which has a similar scope and ultimately identifies a discrepancy between content and real-life experiences. In such cases, young people lack the practical skills needed for effective integration into the world of work and society. Furthermore, over-education frequently results in diplomas that are not even in demand by companies, and individuals with academic qualifications possess skills that are not aligned with the needs of the modern workplace.

In our article, however, we will use the term 'academisation' because of its proximity to our sources.

Conceptual and methodological approach

The objective of this article is to reconstruct the academisation discourse by examining documents that marked two pivotal turning points in the evolution of Swiss VET. Our analysis is primarily based on a set of sources collected as part of the research project, 'The Development of Vocational Training in Switzerland'.[1] In this context, we have assembled a comprehensive collection of texts on VET in Switzerland, spanning the period between 1950 and 1975. The corpus comprises a wide range of documents, including official materials such as laws, regulations, ordinances, government messages, parliamentary reports, parliamentary debates, and statistics. It also includes specialist publications, such as sectorial journals, scientific publications, and reports by professional associations or trade unions. Additionally, the corpus features press articles and other archive documents, such as internal circulars, administrative letters, and handwritten notes. This body of work was then expanded firstly by research into the archives of the Association of the Vocational School Teachers (Schweizerischer Verband für Gewerbeunterricht SVGU) and its journal 'Pages for Vocational Teaching' (*Blätter für gewerblichen Unterricht* – today named *Folio*).

The sources were also expanded for the period from 1990 to now with documents written by several actors, such as the federal office responsible for VET (BIGA – Bundesamt für Industrie, Gewerbe und Arbeit), the Swiss Council for Sciences (SWR – Schweizerischer Wissenschaftsrat), the Cantonal Representants of Education (EDK – Schweizerische Konferenz der kantonalen

Erziehungsdirektoren), and the Association of Directors of Engineering Schools (DIS – Direktorenkonferenz der Ingenieurschulen der Schweiz).

On the basis of this corpus, we have conducted both a historical reconstruction and a discourse analysis to identify the key changes related to the academisation of the Swiss education system from 1950 to the present day, with a particular focus on VET. The discourse analysis approach (Keller, 2011; Landwehr, 2009) is first and foremost concerned with the discourses produced by the main actors in the domain. It identifies regularities at the argumentative level that emerge in the public debate, describing in other words 'what the main players in VET have been saying' on the issue of academisation. In this article we have added some quotes from the sources that support the analysis. All were originally written in German, and translated by us into English.

Secondly, it analyses the conditions under which these statements were possible, responding to questions like 'how could the relevant parties at the time express themselves in this way?', by relating them to the socio-historical conditions of the period in which the statements were made. This approach enables a more comprehensive understanding of the concerns of the key stakeholders and the tensions present in the public debate. In particular, it helps us to better understand the reasons, motivations, and interests that have led the main players to launch reforms in the field, paving the way for a gradual but progressive academisation of VET.

In this line we refer, thirdly, to a historical-institutionalist approach to characterise the emergence of new VET programmes and new forms of higher education. Such reforms aim to maintain stability by responding to new challenges (van der Heijden, 2013), but nevertheless led to a gradual change of the VET and HE systems (e.g., Graf, 2018; Seitzl & Emmenegger, 2019; Thelen, 2004).

The first wave of academisation 1960–1970

The first wave of academisation was a response to a series of challenges faced by the VET domain and Swiss society in general between 1950 and 1970 (Bonoli & Gonon, 2023; Bonoli & Vorpe, 2022). These were the years of the post-war economic boom, with a great deal of technological innovation and an educational expansion. Especially the debate around the Sputnik shock in the end of the 1950s was taken as an incentive to boost scientific but also technical knowledge (Gonon & Zehnder, 2016). In this context, VET was called upon to respond to a first challenge: the great demand for skilled labour by Swiss companies and the need to improve its attractiveness. Secondly, it also had to respond to the new requirements, which meant to include more general and scientific knowledge, in order to adapt to the new production methods. In the 1960s, a number of players

shared a common view of the challenges facing education and work: 'The demand for engineers, technicians', but also 'for members of the so-called lower management' had risen sharply:

> The modern production process generally requires a higher level of theoretical and technical knowledge; we are moving towards a growing intellectualisation of the professions. (Nyikos, 1967, p. 33)

Thirdly, from the 1960s onwards, VET, especially in countries with a well-established dual apprenticeship system like Germany, Austria, and Switzerland, was also part of the debate on social justice (Lipsmeier & Münk, 2022). VET was also meant to contribute to ensuring equal opportunities for all young people in Switzerland, regardless of whether they had a vocational or general education background (Muller, 2012). In this perspective, the desire to broaden and differentiate the content of teaching and learning in VET schools was mentioned in connection with the desire to improve the attractiveness of VET in relation to baccalaureate schools and to ensure equal treatment with students of these schools: with the argument that it is not fair to deprive apprentices of general education when this is extremely important for their future career. These three challenges lead directly to reforms that increase the academic content of VET programmes, in particular by increasing the number of hours in vocational schools and by introducing 'branch courses' that also provide general and theoretical knowledge. This first wave of academisation culminated in the introduction of a new vocational programme, with a new certification, which retained the traditional dual apprenticeship, but with a larger proportion of general education content provided in vocational schools, the so called 'vocational middle school' (*Berufsmittelschule BMS*).

The challenges mentioned above highlighted the need for reform of the existing VET with its dominant dual apprenticeship model. The number of lessons allocated to general culture and knowledge at the vocational school was still very modest. The question of whether the dual model could be relevant as a response to these challenges was raised, with different answers depending on the actors involved. The Swiss Federation of Trade Unions (SGB – Schweizerischer Gewerkschaftsbund) clearly stated: 'the current system of master apprenticeship in its present form no longer meets modern requirements' (SGB, 1971, p. 6). The Swiss Craft Association (SGV – Schweizerischer Gewerbeverband), on the other hand, defended the model unreservedly: 'The Swiss VET system with its emphasis on dual apprenticeship has fundamentally proved its worth. Even with a view to the future development of VET, there are many advantages to maintaining the focus on company-based apprenticeships' (SGV, 1970, p. 12). Nevertheless, both actors agreed on the need to better adapt VET to the new challenges of the time. In particular new technologies and new forms of

production and services were leading – as it was perceived – to an intellectualisation of occupations (Kern & Schumann, 1970).

Hans Dellsperger, head of the VET department at the Federal Office for Industry, Vocation and Labour (BIGA) in the 1960s stated:

> Modern production processes require everyone to have more in-depth theoretical and technical knowledge, which is to say that we are heading for a progressive intellectualisation of vocational tasks. (Dellsperger, 1969, p. 370)

Also, Paul Sommerhalder, vocational teacher in Aarau, president of the teachers' association of the vocational schools (SVGU) and an influential expert at the time, emphasised the appropriateness of the dual apprenticeships 'provided that certain innovations can be realised'. The 'increasing intellectualisation' of work and vocations must be taken into account and 'training must be significantly improved through more effective methods and organisational measures' (Sommerhalder, 1970, p. 19).

Of course, more cautious voices have also been raised in favour of overhauling dual apprenticeships to meet the need for more extensive general content. Hans Chresta, head of the Zurich Cantonal Office for VET warned against an 'over-intellectualisation of VET', based on a stronger role played by the schools. For Chresta the traditional apprenticeship must continue to play its role in training managers in technical professions:

> […] educational models […] are being developed that also consider school-based education with some practical experience to be sufficient for managers in technical companies, although exponents of the industry […] believe that the path to a management position leads through a dual apprenticeship. (Chresta, 1970, p. 6)

Hans Chresta plead instead for 'a more systematic, basic introduction to the profession' (Chresta, 1970, p. 7). On the whole, there was a consensus that more time was needed in vocational schools for everyone, to increase the theoretical and general culture content. Consequently, one of the claims of the SVGU was to widen the mandatory school attendance in general. As, again Paul Sommerhalder and others pointed out, especially for mechanics, electricians, designers, and printer apprentices a third half-day (i.e., an increase from 8 hours to 12 hours of weekly school attendance) was urgently needed. But schools also should provide more options for other apprenticeships. The main subjects to be expanded were mathematics and science but also foreign languages, economic knowledge, and techniques of learning and working (Sommerhalder, 1971).

The claim to broaden general knowledge and school-based learning in VET encouraged considerations to differentiate initial VET in three different programmes: a demanding programme with more theoretical content for strong learners (the BMS certificate), a regular programme equivalent to that already in place, and a more practical programme with less theoretical content for young

people with poor school capacities. This differentiation of school programmes for stronger, regular, and weaker learners in VET was thus precisely defined alongside the question of more or less academic content, which meant a larger dose of general knowledge for 'gifted' learners and a smaller amount for 'weaker' learners.

Fritz Grossenbacher, Director of the Berne Vocational School, pointed out at the annual meeting of the SVGU in Aarau (1967):

> The newspapers in Aargau talk about the stew of the vocational school as a fading meal. Unfortunately, this is true. As long as there is no attractive intermediate stage between the unskilled and the qualified skilled worker, we will have to serve it and spoon it up, in the classroom and at the final apprenticeship examination. (Grossenbacher, 1967, pp. 193–194)

The trigger for such a debate was a claim in the same year put forward by the association of baccalaureate teachers, who seriously discussed the creation of a new school for technical middle managers, based at baccalaureate schools. Lajos Nyikos, the man behind this proposal, put it this way:

> There is a significant gap between baccalaureate school and VET. We proposed to fill this gap with a school for 'middle managers'. This school should offer learners whose talents and career goals suggest a more advanced education […] and at the same time prepare them for a profession. (Nyikos, 1967, p. 32)

Although the perceived shortage of qualified technical personnel was widely shared, the idea of locating such a programme in baccalaureate schools provoked considerable dissent. In particular, some members of the Vocational School Teachers' Association (SVGU) did not hesitate to describe such a proposal as the wrong way to adapt to the possibilities of industry and work ignoring 'the requirements of practical learning' (Keller, 1967, pp. 50–51). This reaction was also marked by the fear that this programme for the qualification of technical personnel would be too much oriented towards general contents and not sufficiently oriented towards the requirements of the world of work, which only a programme within VET could guarantee. So, Paul Sommerhalder and his colleagues responded immediately by suggesting an alternative that would integrate more academic subjects in a programme proposed within the VET domain.

From these reflections emerged the so called 'Aarau'-model which was designed as a three-part track model in vocational schools: 80–85% should follow regular VET programmes, a more practical oriented programme was intended for about 10% of the apprentices, meanwhile 5–7% should enter a higher level of vocational schooling with larger general knowledge content. This more academically oriented track was later cold 'vocational middle school'. It would also be in the interests of VET to be attractive to 'gifted learners', as stated by

Hans Dellsperger, representing BIGA, which is supporting this pioneering project:

> If commercial and industrial apprenticeships are to attract to intelligent young people in the future, they must be able to offer them something. Promoting talented young people at the apprentice level is therefore becoming a task to be taken seriously. (Dellsperger, 1968, p. 194)

When Lajos Nyikos noticed that the SVGU was quicker in realising such a project of such a new vocational middle school, first in Aarau and then in other places, he congratulated his vocational school teacher colleagues. As he wrote in a letter to Fritz Grossenbacher:

> I am convinced that the vocational middle school as part of the vocational school is a big step forward. If it is implemented, we will have achieved more overall than with any reforms at baccalaureate schools […] I have just received Paul Sommerhalder's submission to the BIGA, I can congratulate you wholeheartedly. (Nyikos, 1969, [p. 1])

At the same time Fritz Grossenbacher wrote, after having convinced a great number of VET school teachers and other actors, including the BIGA, in a letter to Paul Sommerhalder: 'The battle has been fought. We have our vocational middle school' (Grossenbacher, 1969, [p. 1]).

This new 'vocational middle school' was launched in Aarau in 1968. The programme was aimed in particular at 'gifted' learners with a stronger academic profile. The new name 'Vocational Middle School' (in german: *BMS* – '*Berufsmittelschule*') was not coincidentally a reference to the existing (and newly founded) middle schools, which beside the traditional baccalaureate schools exactly provided learners with broader general knowledge. Practical training in company and lessons at school remained, but the general curriculum was extended, particularly in the teaching of languages, mathematics, and natural sciences. The orientation of such a vocational school towards academic subjects is remarkable in so far as, despite the orientation towards higher technical schools, the additional subjects were mainly not technical subjects, but – as in the baccalaureate schools – general culture and propaedeutic knowledge, which were to equip the learners with the ability to study.

A crucial point that made this new certificate interesting was the question of access to higher vocational technical schools (*HTL – Höhere Technische Lehranstalten*). Although the BMS did not include any additional technical content, some HTLs waived their entrance exams for BMS holders and granted direct access to their schools. In the end, however, the entrance requirements for HTLs were negotiated locally.

Paul Sommerhalder, the initiator of the Aarau model and the driving force behind the this new programme, was commissioned to develop a similar pathway from the BMS to the HTL and other technical colleges in the canton of

Zurich. In the 1980s, this BMS model, including the possibility of continuing on to technical colleges, spread to other Swiss regions.

> With the approval of a four-year trial phase for vocational schools, the authorities, industry and commerce are demonstrating their willingness to reform vocational education and training and to pursue an active and timely policy for the next generation. (Sommerhalder, 1971, p. 33)

The creation of this supplementary school programme ultimately served two purposes: on the one hand, it responded to a real need for more 'academic' profiles that were also trained in the vocational stream; on the other hand, it was also intended to provide a 'real' alternative to the existing middle schools (Chresta, 1970), aimed explicitly at young 'gifted' learners who would otherwise have opted for the baccalaureate.

However, the placement of the BMS within the vocational system did not prevent baccalaureate school reformers from creating alternative vocational programmes for pedagogical, social, artistic, and para-medical professions that were integrated into the baccalaureate schools. These so-called 'diploma middle schools' also offered a more general education before starting or complementing a vocational programme in these professions, which at the time were not regulated by the BIGA (Criblez, 2003).

The second wave of academisation 1990–2000

In the 1990s, the demand for a highly skilled labour force beyond national borders regained momentum. This debate gave impetus to a second wave of academisation of VET which was more focused on structural reforms. The OECD report on Swiss education, first published in French and then translated and edited by the cantonal representants of education (EDK), analysed education policy in the light of internationalisation and technological change. The experts identified a need for reform in Switzerland, particularly in VET but also in higher education. One of the concluding remarks also stated, that the BMS should be further developed (EDK, 1990, p. 133). Other analyses of the future of the Swiss economy in the early 1990s, such as the influential paper by the Working group on regulatory policy, a group of economists with a neo-liberal agenda, also argued for a boost to education and in particular VET (De Pury, 1992, p. 18).

In the same year, 1992, the Swiss Council of Sciences (SWR) published 13 theses arguing for reforms, in particular the transformation of higher vocational education institutions into universities of applied sciences (UAS). The ('classical') universities should be kept stable and not expand too much, and a new type of higher education at tertiary level should emerge: the UAS. They recommended a new 'vocational baccalaureate' based on VET programmes as a form of regular access. The number of students in the new vocational baccalaureate courses

should also catch up with the number of graduates from baccalaureate schools (SWR, 1992).

In addition, the Federal Office for Economic Issues (*BAK – Bundesamt für Konjunkturfragen*) argued that the VET system should significantly improve general education, reduce over-specialisation, and establish a higher level of vocational education, similar to the baccalaureate (BAK, 1992, p. 39).

Another important player in the debate in the 1990s was the newly founded Directors' Association of Engineering Schools (DIS) which was pressing for international recognition of Swiss technical diplomas awarded by the HTL. In order to be competitive in an international market, the HTLs should be given a status similar to that of tertiary-level engineering institutions in other countries (Kiener & Gonon, 1998). In order to achieve this international recognition, however, it was essential that access to these higher education institutions should be secured via a baccalaureate diploma. This kind of internationally based argumentation aimed at developing a nationwide higher education system on a tertiary level, which should be based on a vocational baccalaureate, as an ad hoc working group including stakeholders from VET and engineering schools claimed (Arbeitsgruppe Schnittstelle BMS/HTL, 1992).

As we can see, different actors argued for the same reform options which included the establishment of a nationwide Federal Vocational Baccalaureate (FVB), not just for technical education but for all professions which could be studied at Universities of Applied Sciences (UAS). These new universities of applied sciences would emerge from the existing technical and commercial higher vocational schools. Here we can clearly see that academisation was no longer limited to a question of content in vocational schools, as in the previous wave, but included more comprehensive reforms at a structural level.

The establishment of a federal vocational baccalaureate was seen as playing a key role in access to UAS. The aforementioned *Berufsmittelschule* (*BMS)*, which had already existed since the 1970s, were in a pole position here. These schools were initially regulated in 1970 by a 'Guide for running and organising Vocational Middle Schools', which very roughly described a framework for such a school. The final qualification was defined as an examination certificate (BIGA, 1970, p. 7). In 1983, two further amendments of the BMS guide followed, which specified certain requirements for the organisation of teaching, curriculum, and examination. Nevertheless, the BMS did not make any real progress in terms of numbers between the 1970s and the 1990s. In 1990, only just under 3% of VET learners were enrolled in such a course. One problem was the scattered implementation in different places and occupations. A more serious deficit was the lack of a binding and generally recognised qualification: only some HTLs and other higher vocational and commercial institutions accepted the BMS certificate

as a sufficient access requirement without further examinations. The stagnation of the BMS was therefore obvious (Martin-Jahncke, 1997, p. 13).

For this reason, the first intention of the VET stakeholders was to establish a regular – and exclusive – entrance certificate to the UAS with the already existing BMS certificate. On the other hand, the priority of the Directors' Association of Engineering Schools, which represented the HTLs, was to improve their status vis-à-vis technical universities. The DIS was reluctant to rely solely on the BMS, as it was sceptical about the quality and level of this certificate (Kiener & Gonon, 1998, p. 33). The representatives of the HTLs and the DIS were therefore also in favour of accepting learners from the traditional baccalaureate schools for the forthcoming UAS (see DIS, 1990). At the same time, they demanded to get out of the VET legislation and to create a specific law for themselves (Oberle, 1987). These two perspectives were confronted with each other rather harshly and led to a stalemate between the actors from the BMS and the engineering schools (see Arbeitsgruppe Schnittstelle BMS/HTL, 1992).

In the early 1990s, it was the EDK that paved the way by supporting the creation of UAS and the introduction of a federal vocational baccalaureate (FVB) as a prerequisite for admission. The technical professions initially played a pioneering role in the development of the FVB and the UAS. The new vocational baccalaureate, which was first introduced for technical professions and later for commercial and other professions, included more general education, with a strong element of regular practical learning in the workplace. The main purpose was to prepare young people for studies at UAS level without leading to a general 'academisation' (Gieré, 1993).

However, the formal requirements, including the amount of general education required to complete a BMS, were fiercely contested by stakeholders such as DIS and VET policy-makers. Nevertheless, a revised regulation for BMS schools was approved by the federal authorities in 1993 (Kiener & Gonon, 1998, pp. 43–50). It was in this 1993 regulation that the term 'vocational baccalaureate' was first coined as a regular diploma certifying the qualifications required for direct access to UAS. The text provides the regulatory framework for four streams (technical, commercial, design and art, but also for work in SMEs and services).
Nevertheless, concerns expressed by the public about the quality of the VET provision to prepare learners for higher education remained until evaluations did confirm that the quality of BMS was sufficient for entry to UAS (Gonon 2017, p. 349).

The development of the FVB and the rise and dynamics of the UAS can be described as a success story. FVB degrees and UAS students have increased in recent decades to establish themselves as a real alternative to the traditional academic route. More or less one of four VET learners is joining a FVB programme (Häni & Kriesi, 2022). Insofar the FVB has been established as an

attractive alternative beside the traditional baccalaureate and the regular VET program (Jäpel, 2016). Today it is out of question, that even with a smaller – compared to traditional baccalaureate schools – amount of general knowledge, the FVB nevertheless provides a sufficient basis for studying on a higher education level (Gonon, 2017; Gonon & Zehnder, 2018).

Conclusion

In the light of historical institutionalism, we can say that, with the FVB and the UAS, new educational institutions have emerged. Academisation as an institutional process of balance and reproduction has led to a new VET system, that is more permeable, especially towards HE. In addition to regular apprenticeships, a significant proportion of learners are now enrolled in FVB tracks, either as part of their apprenticeship or immediately afterwards. These reforms promoted the hybridisation of VET and higher education 'as a specific combination of institutional elements from the two organisational fields of VET and HE' (Graf, 2013, p. 14).

Our historical reconstruction has shown that this evolution was achieved in two waves of academisation: a first wave was driven by an analysis of future challenges that seemed to confirm the view that an increasing intellectualisation based on technology and cultural changes in the workplace, economy, and society was underway. In this wave the gifted learner was in the foreground. She or he should get more general education by completing an apprenticeship.

The debates in the first wave were mainly internal discussions driven by VET teachers and VET school principals within VET. In the second wave we can see a range of actors involved in establishing a new pathway directly through VET to the higher education system. Thanks to the successes of the first wave, issues related to academic content were discussed differently. Access to higher education (HE) was now compared to the traditional baccalaureate programme (Gonon, 1994). Nevertheless, questions about the structure and organisation of the pathway from VET to higher education were at the forefront. The second wave was fuelled by economic and political appeals. In order to be competitive on a global scale, the VET system as such should be transformed into a vessel for recruiting a highly skilled workforce. The main drivers were the technical and engineering schools, which had long argued in favour of stepping up efforts to increase the number of qualified technicians and engineers. The effects of this second wave are major changes in the structure of the Swiss education system, with the FVB and UAS coming in between the vocational streams on the one hand and the general streams on the other.

In terms of 'academisation' the second wave led to a further differentiation of the education system and also increased the potential of learners to study at a

higher education tertiary level. All in all, the reforms, mainly based on FVB and UAS, are now seen as a success story. Starting with an apprenticeship and obtaining a certificate that allows one to enter the world of work and/or to continue studying at tertiary level is now seen as a valuable asset that makes the FVB, and more generally the vocational sector as a whole, attractive. The FVB and the UAS have been accepted by the learners, by politicians, and even by companies.

To conclude our article, we can distinguish between, on the one hand, academisation as a *policy*, as a general *trend*, that has gradually modified and strengthened the legitimacy of the VET system in Switzerland, and, on the other hand, the *public debate* on academisation. Although the reforms that have been initiated within and outside VET have been approved and largely welcomed by various actors in the Swiss education system, there is still a fear in a part of the population and especially among some VET actors, of an overdose of schooling that would alienate young learners and reduce the attractiveness of VET. Academisation is here perceived as a threat and a danger which would lead to a reduction of the importance of the traditional VET system. In such a perspective, the move of education policy and the growing trend of learners towards academia is not seen as a complementary enrichment of VET, but as ruinous competition that ultimately undermines the position of VET (Strahm, 2014). Also, employers' associations plead to avoid an increase in baccalaureate rates, which would diminish at the same time the role of VET (Economiesuisse, 2022, p. 5). In this respect, the term 'academisation' expresses also a blind spot in the reform of VET that keeps alive the debate about the intended and unintended consequences of educational reforms.

Endnote

[1] The empirical basis of this article – regarding the first wave of academisation – was part of a SNF-funded study conducted under the supervision of Lorenzo Bonoli and Philipp Gonon: 'L'évolution de la formation professionnelle en Suisse entre cadre fédéral et différences cantonales. Les années charnières de 1950 à 1970' (Swiss National Science Foundation, PN 100019_179203).

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