

Apprenticeship-Model, Switzerland and European Reforms in VET

VET-Reforms are currently under way in nearly every European country. The main motivation for these reforms is found in the changing economic and societal principles. The knowledge-based society requires more skills in computer science, better language abilities, a greater orientation to entrepreneurship, and more general knowledge overall. Have traditional handicraft apprenticeships come to be jeopardised by these developments? Considering the international prominence of “work-based learning” or the concept of “situational learning”, as well as endeavours to strengthen or reintroduce apprenticeship models characterised by their proximity to the world of work and their practical relevance, it seems that there is a clash of two rather oppositional tendencies in the reform discussions.

Especially the Swiss case of VET reform, mainly based on an apprenticeship-model, gives some evidence how different views of relevant actors can be integrated in one system.

The present contribution aims to provide a historical view of these opposing trends. Education, and in particular professional training, oscillates between immediate professional requirements and more abstract, long-term demands. This discussion is to be found in the theory of education as well as in the development of educational institutions.

Europe-wide, it seems likely that a mixture of curricular and institutional practices continues to prevail, thereby doing justice to the hybridity of the world of work and the youths’ different abilities and prospects.

Work and education – two concepts in flux

Today’s keywords in the discussion of VET in Europe are “key competences” and “life-long learning”. As early as in the 1970s, Dieter Mertens claimed that the educational system should equip learners with the ability to acquire new knowledge and competences in a quick and flexible way, and he referred to this kind of ability as a “key competence”. Also the slogan of “life-long learning”, was created in the 1970s, however in a slightly different sense related to our today’s understanding as a utopia of self-realisation beyond institutionalised education and this slogan has virtually become a categorical imperative for eloquent, computer skilled and entrepreneurial Europeans. The 1960s saw both the onset of the penetration of the world of work by information technology and a valorisation of in-house training and vocational training supported by the companies. In his 1962 article *Education and Vocational Training*, published in the “Berlin working papers for German adult education centres”, the vocational pedagogue Adolf Schwarzlose challenged the seemingly insurmountable contrast between the two notions in the title. He explained the predominant view of the two notions as antipodes with reference to their historical development in Germany. Like Wilhelm von Humboldt and

the Neo-humanists before him, he demanded that instead of conforming to political, economic and mechanic demands, education was meant to impart intellectual traditions and cultural heritage. As a kind of leftover, vocational training had come to be related only to the world of work, and in this conceptualisation, workers had merely been regarded as some sort of functional elements. In contrast, the perfection of individuality by way of cultivating cultural heritage was reserved for education. The pedagogue Theodor Litt had been the first to acknowledge such educational possibilities for the world of work, and with this reorientation, the opposition between vocational training and education had been overcome, since intellectual growth was now possible even outside traditional forms of education. As such, those intellectuals who generally disparaged of the world of work had been deprived of their most common argument (Schwarzlose 1962: 13).

In the USA the gap between liberal education and education for work was not as deep. The management theorist Peter F. Drucker emphasised the practical usefulness of education. According to Schwarzlose, the American debate stressed the fact, that educated society as the basis of economic prosperity should strive to free education from its aura of non-productivity, luxury and even ominousness (ibid.: 15). In the beginning of the 1960s with reference to further reform plans he argued that it was therefore essential to integrate education and vocational training.

Weakening the contrast between education and vocational training

The above considerations are still topical in today's reform debates on vocational training and education in Europe. In the English-speaking world, the „Vocational-Academic-Distinction“ is no longer considered appropriate, too (Hager/Hylland 2003). It has become a widely accepted view to see vocational training as a form of education, and traditional forms of education at schools as economically advantageous.

The German pedagogue Adolf Schwarzlose was surely not the first to argue for the integration of education and vocational training. His contemporary Herwig Blankertz, holder of a chair of vocational pedagogy in the University of Munster, tried to present the contrast between neo-humanism and utilitarianism as fruitless and prone to be misunderstood (Blankertz 1985). In his view, the two philosophies are compatible in a reformed and vocationally oriented school. Looking further back in time, German reform pedagogy and especially American pragmatism are also cases in point. The education politician Georg Kerschensteiner from Munich and the educational philosopher Eduard Spranger reversed Humboldt's formula, according to which general education necessarily preceded any

vocationally oriented training and education. Instead, true education went beyond profession, and profession as vocation was seen as the gate to the true civilisation of man (cf. Gonon 2002). In Paul Monroe's 1913 encyclopaedia, which is oriented towards reform pedagogy, all forms of education are interpreted as vocational, and the prominent philosopher and pedagogue John Dewey criticised the traditional school curriculum on the grounds that it did not do justice to the cultivating character of modern industry. Thus, "vocationalism" does not merely refer to institutional phenomena on the level of secondary school, but it is a decisive concept for the perception of education as a whole.

By extending the notion of education and emphasising vocational skills it was possible to provide easier access to education and to raise the population's educational level – to democratise education, as it were. However, the strong emphasis on economic relevance and commitment that has come to permeate all areas of education from kindergarten to university is sceptically seen as a reductionist and one-sided understanding of education.

Institutional consequences of the reform debate: „Parity of esteem“

The reform debates are important for the explanation of institutional developments and topical reform ideas. Two general trends are observable in Europe. First, the notion of vocational education is understood in a more comprehensive way and it seems to be taken for granted that it includes areas that go far beyond traditional vocational education, such as, for example, university education. Via this extension of the notion of vocational education, the commission and organs of the European Union have gained influence over national education policies, due to their recommendations, measures and enactments.

Second, the rationale for the neutralisation – or at least reduction – of the contrast between education and vocational training is also understandable from the point of view of national economic and social policies. In the light of constant economic development, economic relevance and employability as the desired results of educational endeavours have increasingly gained in importance during the last few years. Closely linked to this development is a revaluation of such institutions and training courses that had hitherto been described as merely "vocational". The general debate is thus characterised by an effort to achieve a parity of esteem.

„Parity of esteem” in apprenticeship-dominated and school-based systems of vocational education

The British vocational education researchers Michael Young and David Raffe refer to four strategies with which to achieve this parity of esteem through institutional measures:

- (1) vocational enhancement
- (2) mutual enrichment
- (3) linkages
- (4) unification (Young & Raffe 1998: 37)

The first strategy (vocational enhancement) can be paraphrased as an attempt to upgrade institutionally organised vocational education and training. Vocational education as a whole should receive greater appreciation, while the system of vocational education should still clearly be profession-oriented. Young and Raffe cite Germany and Austria as examples of the successful implementation of this concept, and we might add Switzerland as a further example.

The second strategy (mutual enrichment) can be found in the Nordic countries, especially in Norway and Finland. The aim of this strategy is to bring the systems of vocational and of general education more in line with each other. In this approach, elements of one system may be found in the other and vice versa.

The third strategy (linkages) is identified by both authors, and is found in England and France. Its main component consists of an identical system of certification and recognition for general education and vocational education, which greatly simplifies the connections between the two educational systems.

The fourth strategy (unification) is the most radical one of the four, since it aims to do away with the distinction between general education and vocational education and training by unifying the whole educational system. This approach can be found in Sweden and Scotland.

From the point of view of vocational education and training, all four strategies are characterised by a revaluation and recognition of the system of vocational education and by its harmonisation with the system of general education. However, due to the peculiarities of the systems of vocational education and training, there is still need for action. In particular, a comparative analysis of the systems in Austria, Finland, Norway, Denmark, Estonia, Hungary, Germany, Belgium, France, Scotland and Greece shows that there are many common needs for reform:

- (1) Improving links with higher education
- (2) Improving links with employers
- (3) Raising the status and qualifications of vocational teachers and trainers
- (4) Improving the vocational education and training curriculum

These strategies as shown in the following matrix:

Table 1: Strategy Matrix: Types of System/Strategy (cf. Young & Raffe 1998)

Strategies for improving parity of esteem (Lasonen & Young 1998)	1. Vocational enhancement	2. Mutual enrichment	3. Linkages	4. Unification
	Germany Austria Denmark	Finland Norway	England France Spain	Scotland Sweden
Substrategies for improving upper secondary vocational education				
(1) Improving links with HE	Reforming and expanding vocational HE	(i) Improving access to existing HE (ii) Creating a new <i>vocational</i> HE system		Creating a single system of post-compulsory education
(2) Improving links with employers	Strengthening the dual system partnerships	Strengthening partnerships between providers of VET and employers		Strengthening links between employers and VET <i>and</i> general education teachers
(3) Raising the status and qualifications of vocational teachers and trainers	Equalising the status of vocational and general education teachers	Providing some common courses for VET and general education teachers		Common training and degrees for general education and vocational teachers
(4) Improving the VET curriculum	Improving vocational education knowledge	More general education on vocational programmes		More integrated learning

External and internal reasons for reforms of (vocational) education: globalisation and relevance for the job market

Today's reform demands are often seen as a consequence of globalisation. Of prime importance in Europe is the education policy of the European Union, which has led to a vocational education policy *for* Europe instead of a vocational education policy *in* Europe in the countries of the EU, but also in Switzerland. Moreover, international surveys like, for example, TIMSS, PISA, IGLU and ALL show that adjustments are inevitable, because in these comparisons the efficiency of the educational systems becomes obvious, both with respect to literacy, mathematical, scientific and interdisciplinary competence as well as with regard to the force of social integration which the various national educational systems can have. However, there are also considerable internal pressures to adjust existing systems of vocational education and training to the ever changing world of work. It is generally agreed that this is much more difficult for systems of vocational education that are purely school-oriented, in other words, for the majority of vocational educational systems in Europe. Still, the pressure for modernisation is strong for the apprenticeship model as well, as is argued in the publication "Rethinking education! The future project" by the Bavarian Economic Association and edited by the educational researcher Dieter Lenzen. In this study, a complete reorientation is recommended to both vocational schools and academically oriented secondary schools (Gymnasium). The authors argue that vocational schools could no longer fulfil their traditional educational mandate — i.e. to complement the practically oriented vocational training with the necessary profession-related theory — for reasons of lack of time or teaching competence (VbW 2003: 170). Yet the academically oriented secondary schools too must concentrate on qualifications that are scientific and related to the world of work (ibid.: 172). According to the study, the present concept of general education has failed and has to be replaced by knowledge-based and competence-oriented qualifications for life (ibid.: 174). Neither secondary schools nor vocational schools provide adequate preparation for employment. In particular, the academically oriented secondary schools tend to exclude [or rarely include] any reference to (academic) professions, and even university studies are characterised by the absence of any practical relevance. What is required, however, are work qualifications, and not only those that are specific to the occupational field but also interdisciplinary ones (ibid.: 179). The study also suggests replacing school curricula with module-based study courses and accepting market mechanisms for vocational education and training, in the sense that the state-controlled regulations concerning educational matters are replaced by private accreditation agencies (ibid.: 180ff.).

Not all reform suggestions are as outspoken and controversial as the one presented above. Still, in most reform debates a common perspective begins to show, favouring a reorientation and extensive institutional reorganisation on the level of secondary school and vocational education and training, especially with regard to a decidedly stronger job-orientation.

“Apprenticeship” as a European model

In Europe as well as internationally the German model of vocational education and training has a surprisingly high reputation, which often stands in direct contrast to the prevailing mood in the nations where comparable systems are actually in use. The “dual system” – vocational training mainly in the firm, complemented with instruction at school – and the “apprenticeship model” – largely based on education and training in the firm, and therefore also called industry-based Vocational Education and Training (VET) – are highly esteemed, although calls for a more school-oriented vocational education have been heard over the past few decades.

Yet traditional apprenticeships, strongly supported by the firm, where the apprentices are trained for a large amount of time, are still an attractive alternative to firmly school-based VET-models, which produce in some cases overqualified, in other cases low qualified or simply wrongly qualified students and alumni, who face transition problems from school to the world of work.

The strengthening of school-oriented vocational education in most European countries in the 1980s and 1990s caused the Norwegian pedagogue Liv Mjelde to conduct a survey with 1617 apprentices, with the aim of comparing school-based with traditional workplace-based vocational courses. 89% of the apprentices said that they preferred learning at the workplace to learning at school. “I am fed up with school”, “I want to do something real”, “I want to work practically and not struggle with theories” were typical answers she got. Therefore, the practical orientation of education clearly is the preferred basis of learning in theory and practice. Learning at the workplace in direct contact with the subject matter as well as with the training supervisor and with colleagues is what meets the apprentices’ expectations best (Mjelde 1993). Similar statements were found in the study by Unwin and Wellington (2001), in particular that it is “work-based learning” that makes vocational education an appealing alternative to traditional instruction.

In their comparative analysis of school-to-work transition in Switzerland and England, Helvia Bierhoff and Sig J. Prais also arrive at the conclusion that a strong “dual system” has many advantages. Compared to the reforms in England, the existence of subjects like art and

crafts, the stronger orientation to vocation and the world of work as well as the comparatively simple and common transition from school to workplace as the place of instruction for many adolescents are considered beneficial. While the authors approve of the efforts to introduce so called “modern apprenticeships” in England as well, they stress that British education policy should be geared to the much higher Swiss standards (Bierhoff & Prais 1997: 98f.). The fact that England swept traditional features of a system of vocational education at the workplace in the 19th century away has been called a mistake by many authors (cf. Deissinger 1992). The reason why the English system has abolished the existing VET structures in the 1980s and strengthened a “new vocationalism” are quite complex and have to be seen in a wider political and ideological debate (Skilbeck et al. 1994). Contrary to all of the rhetoric, the policy initiatives did not reduce the academic-vocational divide.

In these evaluations, comparisons with Germany have often played a role. A similar constellation can be found in France, where all vocational education was reorganised into a completely school-based system. Since the 1970s, alternative systems have been tested by extending the structure of the supporting organisations to the firms where the apprentices are trained. In addition, stronger regionalisation of vocational education and training allows for more options beyond centralistic guidelines (Méhaut 2001).

All in all it is a matter of including a much larger number of adolescents in the educational system and of increasing the proportion of young adults with a professional degree respectively – and this conclusion is generally agreed upon in France as well as in England. It is exactly in this respect that the apprenticeship model is seen as advantageous. The results of new Europe-wide empirical comparative research further stress the positive effects of mainly company-supported forms of vocational education and training (Müller & Gangl 2003: 293f.).

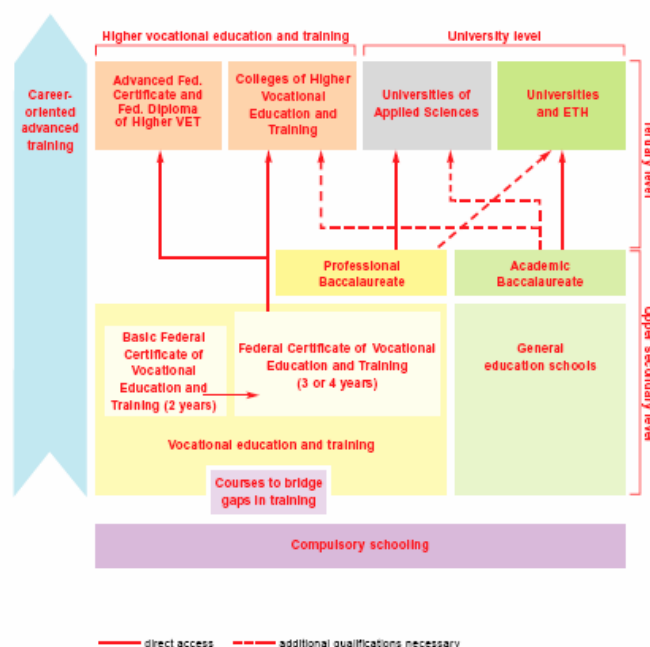
Accordingly, in many European countries, each with its own educational tradition, dual forms of vocational education are tested as an element of the vocational education reform. The resulting beneficial effects of practice-oriented forms of education on learning motivation and learning results are met with approval not only by educational policy makers but also in the realm of educational research (for the Netherlands, cf. Onstenk 2001).

Fernando Marhuenda, a Spanish educational researcher, compares the newly created dual systems in such countries as Spain, France and England to vocational education and training in Germany. In these three countries, “apprenticeships” have been introduced by law, with the main motives being to reduce youth unemployment and to provide young adults with the possibility of getting an education and professional qualifications. Due to these motives,

aspects of general education play a much smaller role than in Germany. Moreover, these emergent systems lack a comprehensive strategy of linking the new dual forms of vocational education to existing forms of education. As a further difficulty, companies have to get used to a culture of learning and to dealing with apprentices. Marhuenda concludes that while the revitalisation of the dual system at the beginning of the 21st century seems promising indeed, it nevertheless holds a number of challenges and unsolved problems, for example, the high number of drop-outs and the fact that these new forms of vocational education are still relatively unknown by the target audience (Marhuenda 2000: 232). How well these new measures will be adopted remains to be seen; the endeavours so far are not generally thought to have had a lasting effect or to have been undertaken comprehensively enough.

The apprenticeship model in Switzerland: embedded in the educational system

The Swiss Reform Act of 2004 explicitly mentions the need for being more flexible and for the provision of innovative models. Nowadays we can speak of a coherent framework in which apprenticeships play in important role and are not dead-end career pathways. The transition from compulsory schooling to apprenticeship or academic education is nowadays more flexible due to new kinds of courses, which bridge the gap in case youngsters do not find an appropriate place for learning. Also, there is a less demanding scheme for Vocational education on the one side and on the other a professional baccalaureate, which gives access to the Higher Education at a Tertiary level (see below).



In such a model the academic-vocational divide is diminished and, as the research shows, is a success story for the reform.

The need for reform in the dual system

Even though the dual system of vocational education and training is often considered a standard in Europe, the discussions in countries in which the dual system has been in use for quite some time – like Germany, Switzerland and Austria – point out a need for reform in this system as well. “The German skills machine”, edited by Culpepper & Finegold (1999), argues from a political economic perspective for the need to be more flexible, despite the competitive advantages of the apprenticeship model. Similar arguments can also be found in the expert’s reports on vocational education and training in Switzerland and Germany (cf. Rauner 2005; Dubs 2005).

As a consequence of economic, technological and cultural developments, a rising number of adolescents, even in Germany, Austria and Switzerland, opt for academically oriented pathways and careers. Furthermore, many companies are increasingly unwilling to train apprentices. These challenges are most pronouncedly felt in those countries where the dual system is the dominant form of vocational education (cf. Gonon 2004) and it is therefore not surprising that the need for modernisation is highly visible in Germany, Austria and Switzerland (Rothe 2001). One of the most urgent problems is the insufficient collaboration of schools and firms, but also the double mismatch of a scarcity of apprenticeship training positions great demand, and also apprenticeship vacancies either due to a falling demand or because the young people do not fulfil the necessary qualifications. Furthermore, what is aimed at is a transition to a more flexible system and easier access to institutional offers, which might be achieved, for example, through modularisation (Ertl 2000: 65ff.)

Conclusion: International convergence and institutional diversity

According to recent analyses of educational research, the problem identified by Blankertz and Schwarzlose at the beginning of the 1960s (and at the beginning of this paper) is losing its urgency. Vocational education and training and general (academic) education will henceforth be less divided institutionally, and neither are they poles apart with regard to content. Preparing for the world of work does not only include the acquisition of solid professional skills but also of knowledge management skills and the ability to ask the relevant questions in order to prepare for uncertainties. In a big international comparative study under Australian supervision a major topic was therefore to challenge the separation of general education and

vocational education (Keating et al. 2002: 166). In this meta-analysis, the (re-)introduction of dual and alternating forms of vocational education and training were strongly recommended (ibid.: 170). In particular the model that has been in use in Germany, Austria and Switzerland for several decades seems to be more sustainable than is generally thought in these countries.

There is almost unanimous agreement about the main elements that need to be strengthened: first, greater involvement and commitment of industry and the firms, which facilitates the young people's integration into the world of work as well as into society. Second, providing apprentices with a good educational background by ensuring the integral role of the schools despite ill-informed/short-sighted ideas of restricting knowledge transfer to the firms where the apprentices are trained. This measure ensures that multidisciplinary knowledge is imparted as well. Third, all of these measures require the active collaboration of different partners. It also follows that the separation of the individual educational systems needs to be overcome. This requirement is all the more relevant if secondary schools and academic education are to become more professionally oriented, as has indeed been demanded by some protagonists of education policy. Higher standards, more economic relevance and better social integration are noble aims which continually require institutional diversity and a long-sighted education policy (cf. Pring 2005).

Despite these common views, different reform strategies have developed in Europe. Still, there are tendencies to seek not only a common view of pending problems but also similar institutional solutions. The convergence of the various discourses clearly depends on a convergence of structures, yet this depends less on the EU's educational policy rhetoric than on the perceptions of individual countries, where similar solutions are seen fit for the respective current systems (Gonon 2004).

Different scenarios are conceivable with regard to the development of new institutional practices. Revaluation of formal education is one possibility, another – directly opposed to this – is the moderate further development of the dual system. However, it is a third model which may be the most promising one in Europe, namely a model of vocational education and training based on a plurality of places and forms of learning, a model that is work-oriented and still easily adaptable. There are many different ways to a learning society in Europe, and this is both unavoidable and welcome.

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