

Challenges in the Swiss Vocational Education and Training-system

The picture presented by Swiss education and training is complex and constantly changing. Understanding it calls for considerable knowledge and expertise, particularly if one wishes to gain an overall view of more than one area covering all parts of the country (see Wettstein, 1994). Historically the Swiss VET system developed out of out of legislations concerning the recruitment of qualified workers and by the 1870s the concept of using a plurality of environments to support training had gained ground in order to put greater emphasis on the value of work-based training (Gonon, 2002). Vocational education in Switzerland begins after the completion of compulsory schooling, i.e. 9 years of primary and lower secondary education, most frequently at the age of 15 or 16. It then continues to higher non-university-education. Vocational education in Switzerland has two principal goals: to impart vocational qualifications and general knowledge

Switzerland tends frequently and over-hastily, to be classified as having adopted the German vocational training model, with no regard to the western (French-speaking) and Italian-speaking parts of the country (Tabin, 1989). As a result use is often made of the term “dual system“, which itself in Switzerland is used mainly when different types of learning environments – school and firm – are combined in a vocational training system. At first glance this might seem to hold few problems but closer scrutiny demands clarification.

As in other countries that run a dual system, there is a never ending debate about the future of Vocational Education and Training (VET)-system. A “Dual System“ means a dominance of the apprenticeship form within the VET-System: youngsters work and learn about 3 or even 4 days in an enterprise and join school classes for 1, 1 1/2 or 2 days. In fact the Swiss system might be better described as a triple system in that it involves three sites for learning: the factory or business place for three or four days, the vocational schools for one or two days a week and the introductory courses (normally for 3 months in a special centre or workshop). Apprenticeships last from one to four years. The most popular skilled occupations are commercial employee, electrician fitter, cook, polymechanic, hairdresser, computer scientist, car mechanic, carpenter and medical assistants. The certificate obtained at the end of an apprenticeship is normally a solid basis to find a qualified work in industry and trade. It is also the basis for further education and training within the enterprise or a first step for higher professional education. Until recently apprenticeships were the foundation of quite long careers within the enterprise.

However, there is no longer such a clear divide between school-based learning and learning in the enterprise. Whereas, historically, vocational schools were intended as a means of supplementing the training provided by employers, they have gradually increased in status.

During the last years the importance of school-based learning has grown, due to the fact that work with much higher quotas of female apprentices, such as caring and social work, is now integrated in the VET-System, or due to new programmes which stress more theoretical work and offer chances of continuing to programmes at a tertiary level.

1 Vocational Training as a System

As Greinert puts it, a system of vocational training is not just characterized by one or several learning environments but as a somewhat more complex construct. For German-speaking countries – or in the Swiss case much better regions – we can speak of a state-controlled market model. It is a system which:

“... is not the outcome of conscious planning and development but has come into being as an integral whole by a complex historical process. For a long time on the job training and instruction provided by the vocational schools evolved more or less independently of one another, only becoming intentionally linked to form a systematic route to a qualification – (...) at a very late date“ (Greinert 1993, p.19).

Greinert discerns beside this German- (speaking) system a more bureaucratic and school-based system and market-oriented training models.

Swiss vocational training is similarly not the result of a forward-looking initiative and planning process; it only came into being in the course of the 20th century on a large scale.

The concept of the system was born out of a historical, political and reform-driven debate. However, the relatively loose connection between vocational school and work-based training and the lack of coordination and cooperation with the rest of the education system has resulted in its nature as a system being denied by some involved in vocational and industrial training; the use of the term “dual system“ is regarded as confusing). Instead the persons’ occupation both structurally and functionally is regarded as the decisive point of Swiss VET (see also Gonon et al. 2001). As Deissinger puts it for Germany, but as is also the case in German-speaking parts of Switzerland, occupation (Beruf) is a function of typically national historical factors and a cultural shaping of the relationships between training and employment, which has ensured that a specific design of framework of economic policy and organisation corresponds with a curricular shaping of vocational qualification (Deissinger 1998, p. 254).

Occupation and the duality of learning environments as typically national modes of control come up against their limits when a country allows different forms of vocational training forms to coexist. This is exactly what has happened in the case of Switzerland. Switzerland therefore has a widely range of diverging regional, cantonal and occupation-specific features. In particular there are a number of hybrid forms extending beyond linguistic frontiers, such as the institutionalised arrangement of school education in combination with work-based training, with a view to provide access to higher education, vocational or otherwise, as well as to employment.

1.1 History of Vocational Education

In the 19th century factories did not provide training for skilled or semi-skilled occupations. When the upsurge in industrial activity and free trade resulted in plummeting sales volumes due to lack of competitiveness, firms took a long time to realise that they needed to enhance the quality of their products to withstand foreign competition, partly by improving the skills of their workforces through training provision.

The road to reform of vocational training was long and arduous. In the late 1820s the “Schweizer Gemeinnützige Gesellschaft“ (SGG) , a public benefit organisation, was already discussing social and political participation and integration and further training in what were known as “Fortbildungsschulen“ (continuing schools – schools which provided a certain amount of general knowledge in order to keep alive the skills and literacy learned in primary schools). On the other hand, business and industry and local trade associations and the Schweizerische Gewerbeverein (Swiss Trade of Association), that was founded in 1879, were originally in favour of hard protectionism against the industrial products of other countries. Some years later, however, they became more open to training reform. This was due to an investigation of international comparisons and a nation wide recruitment examination of youngsters before entering to the army. This early kind of PISA-testing made people aware of the fact that a well educated workforce is important for business, industry and society (see Gonon, 1998). On- the- job training was to be supplemented in the *part-time* further training schools, later known as vocational schools, and in some cases *supplementing this by* training by full-time schools, often called “ateliers publics“ (“öffentliche Lehrwerkstätten“) (Gonon and Müller, 1982).

In 1884 a funding law was enacted in Switzerland, which allowed the federal authorities to fund vocational schools and other institutions like public workshops. In 1930 the first legislation on a national level was introduced. The “Bundesgesetz für berufliche Ausbildung“ defined the professions in arts and crafts in industry. It was now compulsory for every apprentice to frequent the school courses for one day.

However the “take off“ of the predominant dual system in Switzerland and its role for most youngsters after the compulsory schooling occurred after the Second World War. In 1963 there was a small reform of the legislation of 1930. In 1978 a new “Berufsbildungsgesetz“ was created. This law regulated the education in a majority of occupations. The most recent legislation was introduced in 2004 – each piece of legislation can be seen as the answer to perceived new challenges.

The amendments made were designed to underpin and expand vocational training while retaining its existing variety. The dual training model predominant in German-speaking Switzerland owes its existence to the efforts of a number of bodies ranging from occupational organisations and the government to schools, manufacturing firms, parents and apprentices. This kind of development proved to be successful in that it continued to exist with modifications and with an increasing amount of classroom instruction – well into the age of large-scale industry and services.

Moving beyond the opposition between school and workplace learning there is mentioned in the new legislation a third type of learning environment. The idea is a synthesis of learning and work. The new Swiss law on vocational education expressly refers to this third learning environment as a means of combining the advantages of on-the-job-training and classroom learning. In addition, for nearly all occupations there are now introductory courses for young people beginning their vocational courses.

1.2 Educational reform through improvement

An evolutionary perspective on educational reform is key to understand why the Swiss system requires stability and continuity but is at the same time surprisingly dynamic. A variety of models and solutions on a cantonal (regional) stage make it possible to view varying features as experiments being conducted in a sort of large laboratory as a basis for decisions on further innovation.

Generally speaking, a cautious attitude is adopted as regards innovation, so that far-reaching changes have little hope of realisation. For example, during the 1960s the advocates of comprehensive schools and those wishing to increase the proportion of pupils obtaining the Matura equivalent of the German Abitur found progress hard. Plans announced for reform, therefore tend not to have the aim of radically changing the status quo but of improving the existing system.

To date Switzerland stand out as the European country with the lowest proportion of students going on to university in any academic year and one of the highest proportions of young adults achieving a vocational qualification. Upper secondary education is consequently divided into two streams a vocationally oriented one attracting most pupils and a general education stream which, though expanding, accommodates only about 20 % of the Upper Secondary age group. Until 10 year ago general and vocational education were separate and this basic architecture, whose rigid separation probably makes it unique in Europe, has even today been little challenged.

What has happened over the last few years is that the VET system has become more closely aligned to the education system itself. The main reason for this development is rooted in an attempt of political and economic actors, who seek to strengthen vocational education by establishing a “parity of esteem“.

2 International Perspectives on Switzerland

Switzerland tends to be left on the sidelines in the international debate on educational reform and rarely receives a mention in comparative international studies carried out in vocational training research. Only one British study, that by Bierhoff and Prais (1997), attempted to compare some work-related aspects of primary school teaching and vocational training in Switzerland with those in the UK, although even they tend to focus on only one region, the Canton Zürich. A more recent study of German-speaking countries by Rothe (2001) makes

some comparisons between Switzerland, Austria and Germany, but his analysis is not entirely systematic. Yet the surprising scope of reform undertaken in Switzerland over the past few years would justify taking a closer look at the situation from an international perspective.

Also in Switzerland there is a trend towards more academic education and a slow decrease of choices related to vocational education programmes (Borkowsky and Gonon 1998, p. 372).

As in other countries, policy makers are trying to make vocational education and training more attractive. The British Sociologists of Education Michael Young (2000) and David Raffé have discerned several strategies in order to make VET more attractive.

3 Strategy Matrix

Table 1: **Types of System/Strategy**
(Strategy Matrix: Young 2000, p.149)

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 vocational HE system		Creating a single system of post-compulsory education
2) Improving links with employers	Strengthening dual system partnerships	Strengthening partnerships between providers of VET and employers		Strengthening links between employers and VET and 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
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* New partner

Switzerland was not included in this matrix but it is quite obvious that Switzerland belongs to the group of countries that include Germany, Austria and Denmark. The main focus is on vocational enhancement. Thus, the vocational matura opens the way for progression opportunities to Higher Education. Also the third and the fourth elements of the matrix are driven by state-led and school-based reforms: vocational teacher education and new regulations, all facilitated by the new legislation, are intended to enhance over the next few years the quality of vocational education and training in Switzerland. Most critical, however, is the second point: partnerships with the firms. This is traditionally a strong element of the Swiss VET-system. However, economical and cultural challenges have led to a reduction in the engagement of firms.

4 Conclusion

The Swiss education and training system consists basically of two distinct pathways of general and vocational education, which traditionally involved very few crossing points.

In 1993 a “vocational matura“, today called the “Federal professional baccalaureate“ was introduced. The central idea behind this innovation was to make available through the provision of supplementary instruction running in parallel with vocational education, a nationally regulated means of access to institutions of higher education, the so called “universities of applied sciences“. The technical matura thus immediately entitles its possessor to admission to a technically-oriented, generally three-year-course of higher education; the business matura to a one-year-period of practical training in business or administration and then to a three year course in business economics. Alongside these two dominant types of vocational matura there also exist craft, art and design, social work, care and agriculture.

This Professional Baccalaureate was the starting point for a number of additional reforms in VET during the 1990s. This ended with the introduction of the New Vocational Education Law in 2004. The new legislation allows more flexibility in designing pathways and apprenticeships, and integrates further vocational education and also professions like health care and social work.

Despite all of the reforms, introduced over the last few years, the challenge for the Swiss vocational education is quite obvious: the apprenticeship market is in a crisis. There are simply not enough apprenticeship places being offered. Only 30 % of the enterprises run apprenticeship-programmes. Until recently big providers offered places every year for youngsters. New trends, however, show that they hesitate to offer new programmes or are closing existing programmes, due to economic factors or due to a reorientation towards

recruitment of young people with academic qualifications. Especially in occupations like computing or other prestigious work there is an inadequate supply of apprenticeship places. In addition, an increasing proportion of school leavers are opting for the academic track.

All these elements lead to a debate about the future of VET in Switzerland. Most policy makers and researchers are (as in Germany) optimistic about the future. They believe that like every market the apprenticeships have their ups and downs but in the long run the market will reach anew equilibrium of supply and demand at perhaps a slightly reduced level.

Others, however, are quite sceptical that it is possible to maintain in the current industrial world and in a knowledge economy this model of two or three places of learning. Qualifications – they argue – are changing so quickly that it is not possible to provide them thoroughly apprenticeship-schemes. So general education is the best way to prepare for future labour market demands. This trend will be also reinforced through the choices of the youngsters themselves.

Perhaps it is wrong, however, to present these two alternatives as exclusive models. It is quite possible that both positions are right and that the future of VET is an integrated model in the educational system, with some sectors still providing apprenticeships and others being more strictly school-based. In this perspective dual systems and mainly school-based systems will merge to an integrated model, not only in Switzerland but everywhere in Europe.

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