# Chapter 2 Relationship Between Potential Recruits from VET and HE: Case Studies from Germany, England and Switzerland

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### Introduction

Tendencies towards globalisation and demographic developments both exert an influence on Europe's educational systems and labour markets. The consequence of demographic development within the advanced economies will be to intensify the degree of competition between the various educational sectors for the 'scarce resource' of human capital. As one of the OECD countries set to experience the greatest decrease in children of school age over future generations (Federal Ministry of Education and Research, BMBF, and Standing Conference of the Ministers of Education and Cultural Affairs of the Länder in the Federal Republic of Germany, KMK, 2006), Germany may find that the level of competition will be particularly fierce.

These developments will also affect the human resource decisions made by companies. Corporate recruitment strategies and behaviours are currently undergoing change, giving rise to the question of whether the future may see companies placing a greater degree of faith in academic courses of study and raising the issues of whether and how they will differentiate the approach they adopt from country to country or from economic sector to economic sector and whether this will bring divergence or convergence in its wake.

Investigations conducted hitherto have not been focussed at a company level or have not involved themselves with alternative decisions between academic or vocational qualifications. They also have not carried out cross-sectoral comparisons or else were conducted some time ago.

Recent years have, however, seen further developments in training pathways both in Germany and the countries forming the object of comparison. In Germany, school-based vocational education and training has grown in significance, and

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a plethora of vocational training opportunities have developed within the tertiary sector (such as at Universities of Cooperative Education and Universities of Applied Sciences). Not least among the developments have been the changes which have taken place in the higher education landscape within the scope of the Bologna Process. In England, endeavours to strengthen the apprenticeship system have received a new boost, one example of this being the introduction of the 'Diploma' for 14- to 19-year-olds, which requires relevant in-company practical experience as well as the possession of knowledge in general educational subjects. One indicator for the strength of the VET systems in Germany and Switzerland is the completion rate of upper secondary education. In the UK, less people complete an upper secondary education than in Germany and Switzerland. Data from Eurostat show that in Germany, 85.3% of the population aged 25–64 completed upper secondary education (2008), 86.8% in Switzerland but 73.4% in the UK. In contrast, you find a higher percentage of educational attainment at ISCED level 5-6 in the UK (37.9%, compared to EU-27 29.9%, CH 35%, DE 22.6% in 2007). (http://epp.eurostat.ec. europa.eu/portal/page/portal/education/data/database. Accessed 19 July 2010)

## **Research Aims and Questions**

The recruitment strategies and behaviours of companies are changing, and in the future, will more companies have greater faith in graduates than holders of VET qualifications or will they differentiate their approach by country or sector? The project takes an international comparison of the recruitment behaviour of companies as a vehicle for focusing on the interface between the educational and employment systems. Individual qualitative case studies form the basis for the international, cross-occupational and cross-sectoral reconstruction of company recruitment strategies and decisions in the context of changing VET pathways Germany, England and Switzerland.

The importance of research contributing a basis for evidence-informed political negotiation processes aimed at being able to demonstrate the quality and level of VET in comparative European terms is readily apparent, within the context of the European 5-level system from 1985, the revision of the ISCED-97 classification and the allocation processes of qualifications against the new European Qualifications Framework.

Research questions:

- From which educational sectors do companies from within the same branch which are comparable in terms of product range and size recruit their skilled workers for comparable activities?
- From the point of view of the companies, are Bachelor qualifications in direct competition to VET qualifications?
- What reasons do companies have in respect of the recruitment of those who have completed vocational training and of higher education graduates?

• What can incentivise companies to prefer those who have completed vocational training?

Only a very small number of studies comparing international company recruitment strategies are in existence, although some investigations touch on aspects of recruitment.

The general perception that companies adapt their work organisation, personnel recruitment strategies and training programmes to fit the respective output from educational systems is one which has long held sway within internationally comparative VET research. In a Franco-German comparative study, Maurice/Sellier/Silvestre (see also Müller and Shavit 1998) take the view that the way in which qualifications are 'produced' and subsequently used by companies has led to complex and system-specific relationships between qualifications and activities/jobs. On the other hand, growing similarities between educational systems are being identified, arising from the convergence of social systems (Benavot et al. 1991) or which are viewed as having resulted from a rationalisation in production, international competition and an increasing number of companies operating on a multinational scale (Treiman 1970). Festing (2004) emphasises the culturally independent validity of certain behaviours, existing differences being ascribed to different organisational structures in some cases.

# **Methodological Concept**

| Objectives           | <ul> <li>To examine aspects of the effectiveness of VET (as against graduate recruitment) in intermediate skills formation</li> <li>To identify strengths and weaknesses of VET and Bachelors</li> <li>To find out how satisfied companies are with their national educational system</li> </ul> |
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|                      | • To generate ideas about the classification of VET within the EQF   |
| Companies            | 19 companies in Germany, England and Switzerland   |
| Sectors              | Technology, banking and chemical sector  |
| Methods              | Expert interviews with HR managers and managers from the operative departments:  |
|                      | • 1. Phase (completed): 19 guided interviews with heads of human resources responsible for recruitment decisions   |
|                      | • 2. Phase (ongoing): 19 interviews with managers from the operative departments with a standardised grid based on typical activities (work tasks) and competencies of employees with VET and Bachelor qualification   |
| Project period       | 2008–2011  |
| Cooperation partners | BIBB, University Zurich  |

## **Choice of Countries, Sectors and Companies**

The German Federal Institute for Vocational Training (BIBB), the research lead, wanted to compare the German VET system with national systems that were similar and different but operated within the European labour market. The wide range of training strategies and control mechanisms in place in England compared to Germany (an approach based on employability versus regulated occupations) made the former a prime candidate for study. England also has a traditionally developed three-level system within HE (Bachelor, Master, Doctorate), which is just being implemented in Germany (the so-called most different system design, as defined by Georg 2005). Switzerland, on the other hand, is considered to be one of the countries in which vocational training plays a primary role within the educational system, meaning that the starting position is comparably similar to that in Germany ('most similar' design). The three sectors for investigation were chosen to represent different branches of industry, and also because major companies in each of the sectors operated in each country, they employed intermediate (technician) level staff in banking, chemicals and ICT/mechatronic fields. Companies selected for the case studies had to have large numbers of employees and had to operate on a worldwide level. All selected companies had to have a branch office in all the three countries and needed to have some experience with applicants from the vocational education system and also with Bachelor candidates.

# Analysis of the Reasons/Motives for Recruitment Decisions

The evaluation of information from both interview phases on the reasons and motives for recruitment decisions will be facilitated by computer-aided content analysis of the transcribed interviews (Merten 1995).

# **Findings**

The transcribed interviews from the first round of interviews are currently being evaluated and provide the basis for the following findings.

The information/data that will be obtained in the course of this project will not be representative but, rather, personal, company specific and diverse. This, however, is what constitutes its special value. The need for a nuanced examination is particularly evident in connection with the considerable differences in the importance and kinds of Bachelor's degrees. There exists in Germany a wealth of programmes with different structures at different types of educational institutions such as universities, universities of applied sciences (*Fachhochschule*) and colleges of advanced vocational studies (*Berufsakademie*). However, there are also differences

between Germany and Switzerland with regard to the educational background of students at universities of applied sciences. In Switzerland, almost all such students have previously completed formal vocational training. In contrast, in Germany, most students at a university of applied sciences are upper secondary school leavers who have earned the qualification to enter higher education (*Abitur*). In some cases, this has an effect on companies' expectations and the area to which the individual is assigned in the particular company. The very different vocational qualification models in the three countries examined constituted another reason for the choice of the qualitative-methodological approach used in this study.

For this reason, the evaluation of the interviews demands a close and thorough examination of the statements. This in turn also makes it possible to obtain deeper insights into the respective issues. The following presentation of the results of this evaluation reflects this thorough examination and analysis.

# Aspects of the Survey

- (a) General assessment of the strengths and weaknesses of applicants with formal vocational qualification/applicants with a Bachelor's degree
- (b) Selection criteria and expectations during recruitment
- (c) Typical career paths
- (d) Satisfaction with the education system
- (e) Use of competence models

# (a) General Assessment of the Strengths and Weaknesses of Applicants with Formal Vocational Qualification/Applicants with a Bachelor's Degree

In general, there is a tendency to class Bachelor's degrees with other academic degrees. For example, in Germany, the university Bachelor's degree, Master's degree and Diplom are given equal treatment in connection with, for example, trainee or graduate programmes for persons with one of these types of degrees (see also No. 4 below, Typical Career Paths). Apparently, the kind of educational institution where the individual earned the particular degree is important here. Consequently, in Germany, holders of a Bachelor's degree are expected to have a clear academic profile and be capable of academic/scientific work. Doubts whether Bachelor's degree programmes meet these requirements were noticeable in some cases. Expectations were formulated: '... a graduate holding a Bachelor's degree is an academically-trained worker who must be familiar with the use of scientific methods for solving problems and must be able to apply and progressively develop these methods in appropriate ways. When an individual is unable to do so, he is not a "Bachelor" and we consequently do not hire him. Since we have other segments from the vocational training system, since we have other segments via the experience and know-how of our employees, we don't need him'. (BDW 127).

Companies reported very positively on their experience with graduates – in other words, holders of a Bachelor's degree – from colleges of advanced vocational studies. Large segments of such degree programmes are conducted in actual companies. The respondent from one company spoke of a 'hybrid' which 'belongs to vocational training' (CDR 169–177; ADB 155–161). Such graduates play a large role in companies' management planning. Companies value the fact that these individuals already have ties to the company and have gathered practical experience there. One company in Germany has steadily expanded its collaboration with colleges of advanced vocational studies. It reported that a number of its divisions had a strong demand for graduates from these schools. The participating company in the telecommunications sector in Germany also has considerable experience with graduates from dual study courses that combine academic studies with in-company training. This even appears to be the priority field for the company's recruitment activities. Due to the involvement of the company in these degree programmes, they do virtually no external recruitment. They train their recruits themselves.

Persons who have earned a formal vocational qualification are considered to have less theoretical training, whereas persons who hold a Bachelor's degree – with the exception of a Bachelor's degree from a college of advanced vocational studies – are thought to lack practical experience (CDR 317). This lack of practical experience is definitely viewed as a disadvantage with regard to, for example, activities that involve direct contact with customers. It was said that persons who had earned a Bachelor's degree needed a breaking-in period of more than 18–24 months until 'they can walk on their own' (ADB 71).

In Switzerland, double qualifications are viewed as the ideal solution in all sectors because they satisfy both criteria for a top-flight education. In other words, they signal an education that is both academic and practice oriented. Accordingly, the respondents in Switzerland strongly differentiated between a Bachelor's degree from a university of applied sciences – nearly all persons who have earned this type of degree have already completed formal vocational training (in contrast to their counterparts in Germany) – and an academic Bachelor's degree from a regular university (DCA 146-159; CSW 174-177; NCK 190-195). Due to the fact that they have practical experience as a result of their double qualification (vocational training plus a Bachelor's degree), graduates from universities of applied sciences are classed with vocationally trained people. In some cases however, they are ranked even higher than individuals who have earned a Bachelor's degree from a regular university (TCL S 138–141; 72–83). The companies surveyed regard them highly and employ them in large numbers. Practical experience is clearly considered a strength. All in all, it was found that all interviewees in England have theoretical knowledge of the possibility of having formal vocational qualifications. This type of qualification, however, plays only a very small role or no role at all for human resources managers. The situation is somewhat different in the case of the surveyed banks and chemical enterprises that have a German headquarters. These respondents had a positive picture of dual vocational training and tried to foster this type of training in England as well.

## (b) Selection Criteria and Expectations During Recruitment

In England, the companies had clear-cut notions about their reasons for recruiting university graduates. As to be expected, expressions such as 'transferable academic capability', 'high potential' and 'more generic' are to be heard in this connection. It is of secondary importance whether the applicant's training is a precise match for the position (BUX 90–95). Applicants who come from outside the particular field – theologians, for example – are definitely also hired (CEX 59–60). It is evident that the emphasis here is on the personal potential ascribed to university graduates.

The criteria in Germany for selecting applicants with formal vocational qualifications are very similar to those in Switzerland. The starting point for these criteria is naturally the actual function or duties that the position involves in the respective company. This is followed by the impression the applicant makes plays a major role, alongside their final grades (CTR 91;CSW 108-119; TDS 61-62, TCL 39–42). Competences that applicants are expected to possess such as the ability to work in a team, adaptability and motivation were also frequently cited as important criteria when selecting applicants (DCA 122-127). 'Interest' - along the lines of finding enjoyment in the banking profession - is additionally expected. Some of these competences are called soft skills. It is assumed that applicants who have passed their final exams possess an adequate level of professional competence. Soft skills therefore constitute the criteria for selecting applicants. Structured interviews with situational questions are used to determine whether an applicant fulfils the selection criteria (CSW 108-119). In an attempt to assess applicants' motivation, they are requested to write an essay (personal statement regarding one's motivation for applying).

From the surveyed companies' point of view, however, competences and attitudes such as entrepreneurship, creativity, innovativeness and the ability to reflect on one's own choice of occupation are also of key importance (BDW 99). This was emphasised as the opposite of the attitude 'We will pass the time somehow'.

Although the in-company part of vocational training is generally given favourable marks (CSW 208–209), respondents say it is not comparable with the demands placed on persons who hold a 'specific function as an employee'. According to the respondents, trainees 'successfully complete' their vocational training. However, this does not always result in the quality that is required in everyday working life. Although they acknowledge the value of training that is geared to day-to-day practice, the respondents made it clear that they view such training only as a foundation for vital continued development in the areas of personal dedication and responsibility. Positive mention was made of the ability to be deployed on a productive basis without delay (DCA 174–175).

The selection criteria for holders of a Bachelor's degree exhibit a number of differences compared to the selection criteria for persons who have successfully completed formal vocational training. As a rule, respondents described the expectations placed on persons holding a Bachelor's degree as 'higher' than those placed on vocationally trained individuals (CTR 103; CSW 122–123 TCL 130–137).

According to the companies surveyed, the individual's academic record is important, as well as their level of interest and motivation. In areas that involve close contact with customers, great importance is attached to 'personality' because, according to the respondents, employees must be 'on the same level as the customer' (similarly also: DCA 140–141). The 'ability to resolve conflict' and 'communication skills' (CDR 203–207), 'analytical and conceptual skills' and 'internationality' (DCA 136–139) were particularly stressed. Companies surveyed expressly stated that candidates with a Bachelor's or Master's degree are assumed to have greater analytical skills and learning ability than persons who have completed formal vocational training (SCE 145). In contrast, one respondent viewed banking apprenticeships as being 'highly tailored to the particular bank' (DCA 166–167) with the consequence that although persons who complete this training can be put to use faster, some activities require a broader range of skills than are taught during the apprenticeship.

The willingness to work on a 'hands-on' basis is also important (DCA 142–145; ADB 73). Academic 'detachment from reality' was considered to be a minus point.

A reciprocal effect between the companies' assessment of graduates with a Bachelor's degree and these applicants' expectations could be observed during the interviews. Participating companies reported that persons who hold a Bachelor's degree usually expect to enter their company at a higher level, specifically with regard to their salary and chances for promotion (DCA 168–175, 176–179).

## (c) Typical Career Paths

The statements made regarding career paths during the interviews confirm and expand upon the opinion expressed by the companies surveyed that vocationally trained persons and persons who hold a Bachelor's degree are not in competition with one another.

It was often noted that anyone who has proven themselves could work their way up to nearly any position in the respective company (for an example, see also CTR 132–135) and that after several years, the type of education one has no longer plays a role. However, all of the companies surveyed had separate and clearly delineated career paths for vocationally trained employees and for employees who hold a Bachelor's or other degree. This differentiation consequently means different advancement programmes such as management trainee programmes (DCA 218–225; NCK 146–154; CDR 323–329). A distinction must be made here between the theoretically desirable motto 'may the best man win' (CEX 43–44) and day-to-day practice where, particularly in the companies in England, there is a large degree of separation between vocationally trained persons and individuals who have earned a Bachelor's degree.

There are interesting indications that the notion of what a career is or what type of career is of use to employers is changing. Respondents expect an increased delayering of hierarchies as projects gain in importance. In other words, today, 'careers' no longer closely follow the company hierarchy route where the crucial

measure is the number of people for whom one is responsible. Other criteria such as remuneration that rewards successful project management now play a role (NCK 155–170). It is also important for companies to hold on to employees with technical know-how and expertise. However, it can be in some cases that technical know-how and expertise are not consistent with the requirements for a typical career when the way to the 'top' entails responsibilities that revolve around other fields of activity such as tasks that are more administrative or managerial in nature (TDS 79–86). To solve this potential dilemma, 'specialist career paths' are now being developed alongside the traditional 'management career path'.

## (d) Satisfaction with the National Education System

The companies surveyed in all three countries were found to be relatively satisfied with the respective national education systems.

The respondents in England felt that there is a shortage of applicants with an academic degree, particularly in engineering and in mathematical/technical fields. On the other hand, they also said that there is a wealth of university graduates with degrees which they do not specifically need.

A shortage of skilled workers with vocational qualifications is also lamented, particularly in the technology and chemical sectors. The respondents regret that England has devoted too much attention to academic education. 'I think in UK even more so, because our education is pushed out. It has drawn a lot people into the graduate route who, probably in the past, would have gone through the vocational training route. I am not sure that that was necessarily a good thing'. (BUX 62).

As a rule, the companies surveyed in Germany are satisfied with vocational training even though some noted that it has become more difficult in recent years to find very good trainees. 'This means that the quality of the applicants for banking training has declined continuously in recent years'. (CDR 632). Companies in the technology or telecommunications sector pointed out that there are not enough applicants with a university degree that would be a good fit. One point of criticism expressed about the content of Bachelor's degrees is the lack of practical relevance. This criticism was combined with the demand that universities should take the Bologna Process seriously and view employability as the aim of Bachelor's degree programmes. Generally speaking, a fundamentally negative attitude towards the Bachelor's degree is not, however, to be observed in German companies. The Bachelor's degree programmes at colleges of advanced vocational studies are rated very highly because practical in-company training comprises a large segment of these programmes.

All sectors in Switzerland gave vocational training very positive marks. Training that is provided by universities of applied sciences – whose students have generally already completed formal vocational training and then earn a Bachelor's degree – is held in particularly high regard. The chemical and pharmaceutical sectors reported a shortage of suitable candidates for their vacancies. The telecommunications sector was even more emphatic about the shortage of engineers. There was also

no criticism of vocational training to be heard in the interviews conducted with respondents from the mechanical engineering sector. Instead, there was criticism of the Bachelor's degrees granted by universities. Here, the respondents charged that social and methodological competence is not taught in Bachelor's degree programmes at universities. In Switzerland, however, satisfaction with the different forms of training applicants have to offer is very high as a rule. It is highest with formal vocational qualifications.

## (e) Use of Competence Models

Recruitment is geared to the competence model used by the respective firm. All of the companies surveyed use their own competence model, which most firms regard as a confidential internal document. In most cases, these models were developed by external service providers, the majority of which were management consultancies. Most of the companies surveyed have been using a competence-based model in their recruitment activities for an average of approximately 6 years. These models usually take a behaviourist or generic approach to the concept of competence. In other words, core competences which a company's employees should have are outlined in a competence model where they are described and explained in greater detail. Core competences apply to employee behaviour in specific work contexts. Some models provide for different levels of the respective core competence. For example, a vocationally trained employee is not expected to reach the same level of accomplishment in a core competence as an employee who holds a Bachelor's degree. Professional competence also plays a role in competence models. It should also be covered during the recruitment process. However, the substantive focus of these models is clearly on social/personal competences.

## Conclusion

Vocational training is very positively rated in both Switzerland and Germany. All of the companies surveyed in Switzerland and Germany provide in-house vocational training. In England, some of the companies surveyed expressly regretted that there were too few good applicants and/or employees with vocational qualifications. All in all, the interviewees in England had considerably less experience with vocationally trained individuals. Only in a few rare cases were vocationally trained people perceived as a useful pool for recruiting skilled workers for mid-level positions. This can be observed across various sectors. These companies provide almost no in-house vocational training, even though they all have fellow subsidiaries in Switzerland or Germany. In fact, the headquarters of six of the seven companies surveyed are located in Germany or Switzerland. Only one company – in the banking sector – had its own training programme.

The companies surveyed do not consider vocationally trained applicants to be in competition with applicants who hold a Bachelor's degree. Not only the envisaged career path but also one's continuing professional development within the respective company is different, depending on whether the individual is vocationally trained or has earned a Bachelor's degree. This correlates with the expectations of persons who hold a Bachelor's degree. It is interesting that a strong differentiation is made in Switzerland between a Bachelor's degree from a university of applied sciences and a Bachelor's degree from a regular university. The double qualification offered by graduates from a university of applied sciences is very positively rated and is accordingly credited during recruitment. In Germany, this differentiation is made between persons who earned a Bachelor's degree from a college of advanced vocational studies (whereby in some cases, the respective company was actively involved in the particular individual's training) and persons who earned their Bachelor's degree at a university. The first group is perceived as very vocationally oriented and practice oriented. In the case of the second group, there was uncertainty in some instances over what competences and skills these persons actually had to offer. It was not clear what the positive unique feature of this type of education is. Although persons who hold a Bachelor's degree from a university are currently given access to widely offered trainee and graduate programmes on the strength of their degree, there is however doubt whether, after completing what is presently a 3-year degree programme as a rule, such persons actually have the qualifications and tools needed for working on an academic/scientific level. In addition, many holders of a Bachelor's degree from a university have only rudimentary practical experience. Due to their 'education portfolio', such individuals are therefore at risk of being at a disadvantage vis-à-vis graduates from a college of advanced vocational studies in Germany or a university of applied sciences in Switzerland during recruitment.

In terms of improving the attractiveness of vocational qualifications in Germany and Switzerland, this means that such qualifications must offer individuals different options, namely, the option of earning a double qualification at one time and the option of earning a double qualification on a successive basis.

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