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Cedefop assists the European Commission in encouraging, at Community level, the promotion and development of vocational education and training, through exchanges of information and the comparison of experience on issues of common interest to the Member States.

Cedefop is a link between research, policy and practice, helping policymakers and practitioners, at all levels in the European Union, to have a clearer understanding of developments in vocational education and training and to draw conclusions for future action. It stimulates scientists and researchers to identify trends and future questions.

The journal is nevertheless independent. It has an editorial committee that evaluates articles following a double-blind procedure whereby the members of the Editorial Committee, and in particular its rapporteurs, do not know the identity of those they are evaluating and authors do not know the identity of those evaluating them. The committee is chaired by a recognised university researcher and composed of researchers as well as two Cedefop experts, an expert from the European Training Foundation (ETF) and a representative of Cedefop's Governing Board.

The *European journal of vocational training* has an editorial secretariat composed of experienced researchers.

The Journal is included in renowned bibliographical databases
(see http://www.cedefop.europa.eu/etv/projects_networks/EJVT/links.asp).

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Editorial

Dear readers, dear authors,

This current issue of the *European journal of vocational training* (EJVT) is thematic. It discusses the relations and links between vocational education and training (VET) and higher education (HE). Institutional reforms of various natures are taking place in Europe. Some focus on improving the attractiveness of VET, others on increasing education and training's responsiveness to labour market needs, or on increasing the flexibility and bridge across educational pathways in the spirit of lifelong learning. As a result of these institutional reforms, the boundaries and respective functions of VET and HE are being reconsidered and sometimes become blurred. The articles gathered in this issue discuss such transformations, embedding them in specific national institutional contexts and preoccupations: opening access to HE for VET graduates in France, Switzerland or Germany; moving boundaries between VET and higher education in Australia and transition countries; integrating HE into lifelong trajectories in France and Portugal; the impact of the Bologna process on local institutional reforms in Europe and Europeanisation of education and training policies.

From 2009, starting with this issue No 46, the EJVT will be published in English only. From now on, articles will also be accepted only in English. This closes a chapter of the EJVT's history, which used to be published in five languages, with articles accepted in all EU languages. Such streamlining of the journal's language regime results from heavy budget cuts decided by the Council and the European Parliament for the period 2009 to 2013 and affecting several European agencies' budgets, including Cedefop's. These heavy budgetary constraints have forced Cedefop to refocus its activities and redirect its resources, which also take account of Cedefop's increasing support to the EU, its Member States and

social partners in developing new policies and European approaches, tools and principles to modernise European VET systems.

Despite this new language regime, the EJVT will continue to form a link between research, policy and practice. It will continue to help to provide a clearer understanding of developments in VET, being a source of information on topical research and scientific debate at European and national levels. We therefore very much hope you will continue to read and contribute your articles to the EJVT.

We should like to thank warmly Éric Fries Guggenheim, former editor in chief, who prepared this thematic issue, following an Agora conference organised by Cedefop on 'Higher education and vocational education and training' in February 2007.

Cedefop's EJVT editorial team

The vocational baccalaureate: a gateway to higher education?

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SUMMARY

Keywords

Vocational
baccalaureate,
vocational education
and training,
higher education,
continued education,
democratisation,
equal opportunities

Access to the baccalaureate and higher education in France has become more democratic. The introduction of the vocational baccalaureate has been part of this process, but remains a modest step forward given the very low take-up of vocational baccalaureate courses. If vocational education pathways in France are to become true gateways to higher education and social mobility, career guidance and lifelong learning need to become more effective and the French higher education system needs to be rethought to achieve integrated pathways that complement one another and at the same time differentiate themselves from one another, replacing a sterile, counter-productive hierarchical system.

Introduction

Improving the standing of vocational education in Europe has been a major concern since the early 2000s (Leney et al., 2004). In the countries of the the European Union this has manifested itself in different ways depending on the structure of their education systems. In France, the system of secondary education is a hierarchical system with a strongly dualistic structure. It was altered by the introduction of the vocational baccalaureate diploma (*baccalauréat professionnel or Bac Pro*) (Gendron, 2006). This was created in order to offer students who fail in general education a way of continuing their education, to stabilise the dropout rate and to open up access to studies at baccalaureate level. The target pursued by the Ministry of Education since the 1980s, of bringing 80 % of a cohort to baccalaureate level, has assumed considerable importance and consequently this diploma has become a major educational yardstick (Hanchane and Verdier, 2003). Indeed, a desire to improve the status of vocational education made itself felt in France well before the Lisbon Summit as a response in particular to the need for, and lack of, people with a technical training who were also sufficiently adaptable. This approach already attempted to address the issue of exclusion and dropout from the school system, a concern that became apparent at European level at the start of the 2000s (Leney et al. 2004, p.108). One of the main policy measures in France consisted of lengthening the vocational and technical education pathways by introducing new diplomas: in secondary education these included the vocational baccalaureate, which corresponds to level 3 of the International Standard Classification of Education (ISCED) and gives access to higher education. In fact the baccalaureate has come to represent an important crossroads in a student's educational career, a decisive moment at which the questions of whether to continue in education and of a future career need to be considered. Given that one of the priorities of the European Union is to ensure that general, technical and vocational education pathways enjoy parity of esteem (Lasonen and Manning 2001), the question to be asked in France today is this: has the vocational baccalaureate diploma become a genuine gateway to higher education?

In answering this question, we will briefly examine the structure of the French system of initial vocational education. On this basis and using statistical data, we will go on to demonstrate to what extent this new diploma has opened up access to higher education. Secondly, we will take a more critical view and endeavour to show

that the realities underlying this data are rather different and that if progress has been made, it remains modest when measured against the European recommendations.

The system of initial vocational education

The structure of initial vocational education at secondary level

The organisation of vocational education in France is somewhat unique in that it is widely established in institutions offering upper secondary education under the authority of the Ministry of Education. Vocational education is also found at vocational *lycées* governed by the Ministry of Agriculture and in the form of apprenticeships at apprentice training centres (CFA). The present study, however, will refer only to training courses that are the responsibility of the Ministry of Education.

In France, secondary education coming under the Ministry of Education consists of three pathways at upper secondary level (see Table 1): the general, technological and vocational pathways. The latter is the one we are interested in here. After completion of studies at lower-secondary level, the vocational pathway prepares students of around 14-15 years of age to take a *certificat d'aptitude professionnelle* (CAP, certificate of vocational aptitude) or a *brevet d'études professionnelles* (BEP, vocational studies certificate), which can lead on to the vocational baccalaureate.

Creation of and access to the vocational baccalaureate: what is the impact on training at lower levels (Level V)?

What are the vocational baccalaureates?

Created in 1985 the vocational baccalaureate was intended to 'enrich' secondary-level vocational education in France by adding a Level IV training course corresponding to European diploma Level 3. It was designed to 'enrich' the system in three important ways. First, the creation of the vocational baccalaureate allowed students who had obtained the BEP (vocational studies certificate) to continue their education (see diagram). Second, the prestige associated with the mere title 'baccalaureate' helped to raise the status of the vocational pathway. Obtaining the baccalaureate of whichever stream (general, technological or vocational) is of tremendous significance to a student's family. Finally, as a diploma obtained on completion of secondary education,

Table 1. **Simplified diagram of the French system of secondary and tertiary education (and apprenticeship system)**

		Principal certification within general curriculum (in the education system: student status)			Certification by Apprentice Training Centres (CFA) (apprentice status)	
Higher education	18 years and above	Level II-I	Doctorate	New structure following implementation of the Bologna process (3+2+5) Doctorate		Graduate engineer
			Advanced Studies Degree (DEA)	Master's Degree (formerly <i>maîtrise</i> + DEA or DESS)		
			Higher Specialised Studies Degree (DESS)	Engineering Degree		
			Engineering Degree	Engineering Degree		
		Master's Degree (<i>maîtrise</i>)				
Level III	3 to 4 years of study	Bachelor's Degree (<i>licence</i>)	Post-DUT/BTS	Bachelor's Degree (<i>licence</i>)	Vocational Bachelor's Degree (<i>licence professionnelle</i>) Post-DUT/BTS	
		Vocational Bachelor's Degree (<i>licence professionnelle</i>)		+		
		Post-DUT/BTS		Vocational Bachelor's Degree (<i>licence professionnelle</i>)		
Level IV	15 to 18 years	University technology diploma (DUT)	Diploma of general university studies (DEUG)	University technology diploma (DUT)	DUT, BTS	
		Higher technical certificate (BTS)		Higher technical certificate (BTS)		
Secondary School	3 to 4 years of study	Level IV	Baccalaureates (general, technological and vocational)			<i>Baccalaureates</i>
		Level V	Other pre-baccalaureate vocational diplomas: Vocational Studies Certificate (BEP), Certificate of Vocational Aptitude (CAP) (¹)			BEP, CAP

Note: For all abbreviations, see glossary on page 23.

(¹) **Differences between the CAP and BEP:** The BEP (vocational studies certificate) offers more general and broader training than the CAP (certificate of vocational aptitude), which offers opportunities for gaining more specific skills. In practice the CAP mainly leads to employment, which is why the CAP covers a larger number of specialist subjects than the BEP (200 compared with 40). The BEP, on the other hand, offers training that is less specific, training, which can therefore lead on to the vocational or technological baccalaureate.

the baccalaureate gives access to higher education and constitutes the first stage of higher education, even if its primary aim is to facilitate entry onto the labour market. Its objectives were ambitious: to establish training for future workshop technicians, to promote vocational training and to foster cooperation between schools and enterprises through alternance training. In this respect, it was in the vanguard of European endeavours to increase the standing of vocational pathways.

What was the impact of this diploma on vocational education diplomas? A breath of fresh air

Since the establishment of this diploma there has been a significant increase in the number of students obtaining the BEP and conversely a fall in the number of those taking the first diploma, the CAP, along with strong growth in the vocational baccalaureate. The following observations can be made on the basis of the statistical data in Table 2 below:

**Table 2. Access rates to educational level IV
(all initial training courses combined)**

	Metropolitan France		Metropolitan France + Overseas Departments			
	1980/81	1990/91	2000/01	2004/05	2005/06	2006/07
General baccalaureate	22.1	33.4	34.0	34.6	35.1	35.1
Technological baccalaureate	11.9	17.6	21.6	20.4	19.9	18.8
Vocational baccalaureate	0.0	5.0	14.0	14.7	15.2	15.8*
Total	34.0	56.0	69.6	69.7	70.2	69.7
MEN*	33.0	54.0	63.2	63.5	63.8	63.2
Agriculture	1.0	1.4	2.7	2.5	2.5	2.6
Apprenticeships	0.0	0.6	3.7	3.7	3.9	4.0*

Figures for apprenticeship training are based on estimates.

Source: MEN-MESR-DEPP

* MEN: Training courses under the authority of the Ministry of Education
Taken from *L'état de l'école 2007 (The state of education 2007)* No 17 page 57. Available from Internet: <http://media.education.gouv.fr/file/05/5/7055.pdf> [Accessed on 11/01/2008] (°)

(°) *The première d'adaptation* class allows students holding a BEP (vocational studies certificate) who perform well in general subjects to prepare for the technological baccalaureate. This class acts as a bridge, focusing on general subjects that are not covered as fully in the BEP due to its vocational emphasis.

(°) *L'état de l'école 2007 (The state of education 2007)* is also published in Spanish http://media.education.gouv.fr/file/espetat17/19/9/espetat17_21199.pdf and *L'état de l'école 2006 (The state of education 2006)* in English and Spanish
EN: <http://media.education.gouv.fr/file/68/0/3680.pdf>
ES: <http://media.education.gouv.fr/file/68/1/3681.pdf> (Editor's note)

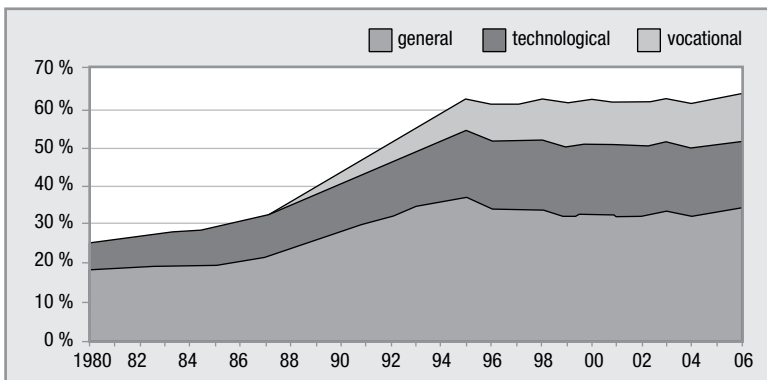
- Firstly, one student in two continues their studies after obtaining a CAP-BEP, with more going on to take the vocational baccalaureate or vocational certificates than the *première d'adaptation class* ⁽²⁾ (general and technological stream in upper secondary).
- Secondly, after the introduction of the vocational baccalaureate, nearly 14.5 % of a cohort of students achieved vocational baccalaureate level in 2004 compared with 5 % in 1990-91.

In other words, almost 70 % of a cohort of students achieved baccalaureate level (ISCED Level 3), of whom 35 % obtained the general baccalaureate, nearly 20 % the technological baccalaureate and around 15 % the vocational baccalaureate.

If the introduction of the vocational baccalaureate has helped to make access to the baccalaureate more democratic, how many students obtain the diploma?

As a qualification, the vocational baccalaureate is becoming an increasingly important feature of the educational landscape. While today some 85 % of candidates pass the general baccalaureate, the success rate for the vocational baccalaureate reached 75 % in 2005. The overall proportion of students gaining the baccalaureate in 2004 (see Figure 1: Proportion of students in a cohort obtaining the baccalaureate) was in excess of 61.7 %, of whom 32 % were in the general stream, 17.7 % in the technological stream and 11.7 % in the vocational stream. Of 100 students who were successful, 52 hold the general, 29 the technological and 19 the vocational baccalaureate.

Figure 1. **Proportion of baccalaureate holders in a cohort (1980-2006) in metropolitan France**



Source: Ministère de l'éducation nationale

Taken from *L'état de l'école 2007 (The state of education 2007)* - No 17 page 65

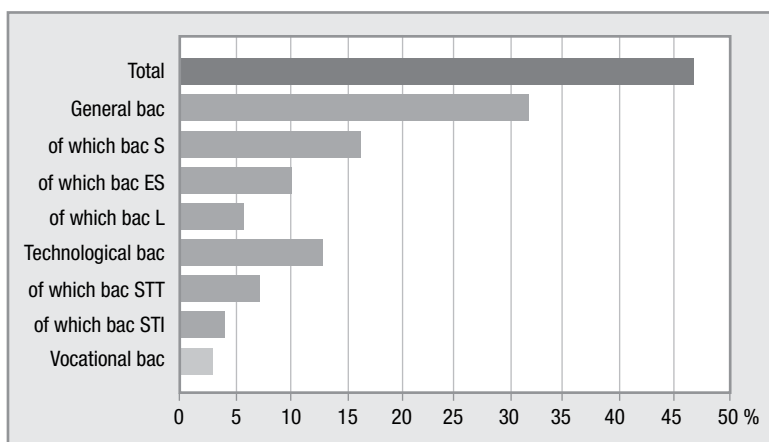
The vocational baccalaureate: a doorway to higher education?

How many students continue their education, where and with what success rate?

Overall situation:

Of the total 62 % of students obtaining the baccalaureate of whichever type, almost 50 % of a cohort went on to higher education in 2005, of whom 33 % held a general baccalaureate, 13.5 % a technological baccalaureate and 2.6 % a vocational baccalaureate.

Figure 2. **Rate of access to higher education of a cohort by type of baccalaureate**



Note: For all abbreviations, see glossary on page 23.

Source: MEN-DEPP

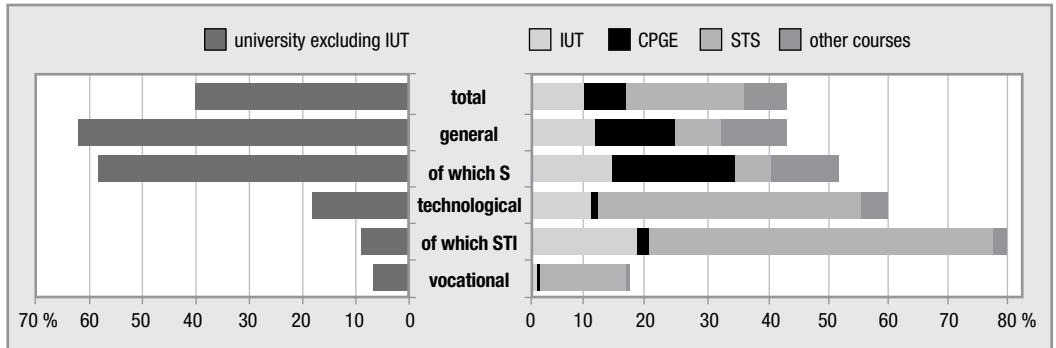
Taken from *L'état de l'école 2006 (The state of education 2006)* - No 16 page 61.

Available from Internet: <http://media.education.gouv.fr/file/07/9/3079.pdf> (Accessed on 11/01/2008)

How many vocational baccalaureate holders continue in education?

Unlike the other baccalaureates, the vocational baccalaureate leads only a few people to continue on to higher education (23 %), with the majority entering the labour market (77 %). Students are encouraged in this direction by those who provide educational guidance and by teachers, since this diploma was originally intended to help people into work.

Figure 3. Rate of access to higher education of a cohort by type of baccalaureate



Note: For all abbreviations, see glossary on page 23.

Source: MEN-DEPP

Taken from *L'état de l'école 2005 (The state of education 2005)* - No 15 page 67.

Available from Internet: <http://media.education.gouv.fr/file/07/6/3076.pdf> (Accessed on 11/01/2008).

Is access improving? What courses are students moving on to and with what success rate?

The increase in the number continuing their studies has now begun to stabilise, from 17 % ten years ago (1997) to 23 % today. Those continuing in education are split between non-university and university pathways. Thus of the 23 % who continue immediately after the bac, one in four takes a BTS, one in 10 chooses a supplementary training course (*Mention Complémentaire or Formation Complémentaire d'Initiative Locale*) and less than one in 10 goes on to university.

What courses are students moving on to immediately and with what success rate?

WHAT ARE THE *BREVETS DE TECHNICIENS SUPÉRIEURS* (BTS, HIGHER TECHNICAL CERTIFICATES)?

These are short two-year training courses including in-company traineeships that are based on what might be called a 'traditional' approach to an occupation, the principle being to provide specialised technical training at an advanced level for those who will go on to work as technicians (in industry) or in medium-level jobs (in the service sector). While the BTS is the principal form of further training

Table 3. **Immediate enrolment of baccalaureate holders in the various higher education pathways***

Metropolitan France and Overseas Departments				
	1997	2004	2005	2006
General baccalaureate				
University excluding IUT	66.7	62.1	61.3	58.8
IUT	9.8	10.7	10.4	10.5
CPGE	13.0	13.6	13.3	13.2
STS	9.0	7.8	7.7	7.8
Other training	7.7	10.8	11.1	10.8
Technological baccalaureate				
University excluding IUT	22.0	18.1	18.1	17.4
IUT	10.2	10.2	10.4	9.9
CPGE	0.9	1.1	1.1	1.1
STS	46.1	44.1	44.0	42.5
Other training	3.0	4.7	5.0	5.0
General and technological baccalaureate combined				
University excluding IUT	51.7	46.5	46.5	45.0
IUT	9.9	10.5	10.4	10.3
CPGE	8.9	9.2	9.1	9.2
STS	21.5	20.6	20.1	19.3
Other training	6.1	8.6	9.0	8.9
Vocational baccalaureate				
University excluding IUT	6.8	6.4	5.9	5.8
IUT	0.8	0.7	0.8	0.7
CPGE	0.0	0.0	0.0	0.0
STS	8.9	15.2	15.7	15.5
Other training	0.8	0.6	0.6	0.6
All baccalaureates together				
University excluding IUT	44.5	38.9	39.1	37.5
IUT	8.5	8.7	8.7	8.4
CPGE	7.5	7.4	7.4	7.4
STS	19.5	19.6	19.3	18.6
Other training	5.3	7.1	7.5	7.3

* Excluding apprenticeships

Note: For all abbreviations, see glossary on page 23.

Source: MEN-MESR-DEPP

Taken from *L'état de l'école 2007 (The state of education 2007)* - No 17 page 65.

chosen by vocational baccalaureate holders (*i.e.* 15.5 % of students obtaining the vocational baccalaureate enrol for a BTS), entry to this form of training is selective (based on school reports or requiring grades of 'Good' or 'Very Good' for the baccalaureate). In 2004 the pass rate was a mere 45 % across all specialisms. Some of these students also completed it by means of alternance training.

With regard to supplementary training courses (*MC, mentions complémentaires* or *FCIL, formations complémentaires d'initiative locale*), about one baccalaureate holder in 10 chooses this route, where they can specialise or acquire skills in two areas over a one-year period. Fewer than one in 10 go on to university. Indeed, of the 23 % of vocational baccalaureate holders who continue their studies immediately, 0.7 % enrol at University Institutes of Technology (IUTs) and 5.8 % take a bachelor degree (*licence*) at university.

WHAT ARE DUT COURSES?

These are two-year training courses that are more theoretical than the BTS and culminate in the university diplomas in technology (DUT) awarded by IUTs. Access to these courses is highly selective, with IUTs taking 0.7 % of vocational baccalaureate holders, who moreover account for no more than 2 % of first-year students. While access to the DUT is limited for vocational baccalaureate holders, those who undertake this training are relatively successful: 51 % of vocational baccalaureate holders enrolled at IUTs succeeded in obtaining their diploma in 2004 (even if they represented less than 4 % of the total number achieving a DUT).

WHAT ABOUT THOSE WHO CONTINUE WITH A BACHELOR'S DEGREE AT UNIVERSITY (EXCLUDING THE IUTS)?

Since entry to university in France is not selective, 6.4 % of vocational baccalaureate holders enrolled at university in 2004. However, this proportion fell in 2005 to 5.9 %. These 6 % of baccalaureate holders represented just 3 % of first-year university students. It is fair to say that the university option is fraught with risks and extremely unsuitable for vocational baccalaureate holders because courses leading to a bachelor's degree, three years after the baccalaureate, are highly theoretical and a far cry from the education received at the vocational *lycée*. Consequently, only one vocational baccalaureate holder in 10 who goes on to university will manage to obtain their degree (3-5 years of study).

Table 4. Assessment of the educational career of baccalaureate holders in the 1989 student panel, by principal type of baccalaureate

	Entering higher education*	Obtaining a higher education diploma			Non-certificated higher education courses
		Total	of which bac + 2	of which bac+ 3 or +	
bac ES	97.5	84.1	23.3	60.8	13.4
bac L	96.2	78.3	18.3	60.0	17.9
bac S	98.5	92.5	19.9	72.5	6.1
General bac holders	97.7	86.8	20.4	66.5	10.8
STT	89.0	55.9	44.6	11.3	33.1
STI	94.3	74.8	62.0	12.8	19.5
Other technological	81.9	52.6	23.6	29.0	29.3
Technological bac holders	89.1	60.2	45.3	14.9	28.9
Vocational bac holders	31.1	10.4	9.5	0.9	20.7
All bac holders	86.2	69.1	25.6	43.5	17.1

*At the start of the academic year after they obtained their baccalaureate or the start of the subsequent academic year.

How to read this table: 97.5 % of economic and social (ES) baccalaureate holders go on to higher education, where 84.1 % obtain a diploma.

Note: For all abbreviations, see glossary on page 23.

Source: 1989 Student Panel MEN-DEPP

Taken from *L'état de l'école 2006 (The state of education 2006)* - No 16 page 67.

What conclusions can we draw?

While it can be observed that the number of pupils following vocational pathways towards the baccalaureate is increasing and that more students are continuing into higher education, behind the figures for entry to higher education the realities are rather different, depending on baccalaureate type.

Differences in access due to past educational pathway

The rate of entry into higher education for a given cohort varies, depending on the type of baccalaureate achieved: it is relatively low for students with the vocational baccalaureate, at 2.6 %, compared with over 30 % for those with the general baccalaureate. Furthermore, success in higher education also depends on the

type of baccalaureate obtained. The highest failure rate is found among those with the vocational baccalaureate: 10.4 % achieve a higher education diploma compared with 86.8 % of students with the general baccalaureate.

Choice of higher education course and social background

While a majority of students following prestigious higher education courses (CPGE, preparatory classes for the *Grandes Écoles*) are the children of executives and hold the general baccalaureate, the children of working-class parents are more likely to hold the vocational baccalaureate and to study for the BTS (higher technical certificate). This difference stems from the way in which these pupils are still to a very large extent guided towards the vocational *lycée* on the basis of social background. Even if it is clear today that social background is not the only factor in educational success, it still remains extremely significant: 'Socio-economic groups attending the vocational *lycées* are invariably distinguished by their humble origins and relative failure in general education,' (Solaux, 1996).

Differences in the duration and cost of courses

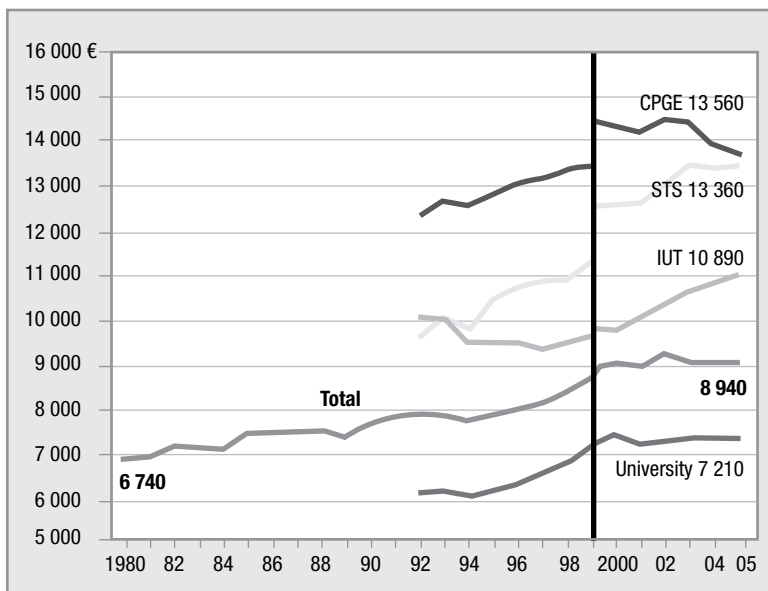
The courses chosen by holders of the vocational baccalaureate are not the most expensive. The CPGE courses, mainly taken by general baccalaureate holders, are the most costly. In order of cost and expenditure, we find that vocational baccalaureate holders account for 0 % of those on CPGE courses, 15 % of first-year BTS students, 2 % of first-year IUT students and 3 % of first-year university undergraduates ⁽⁴⁾. Nor do they choose the courses of longest duration: indeed, holders of the vocational baccalaureate study for a shorter period in higher education than those with the other baccalaureates.

Does continuing education help to reduce these differences?

This question refers to the link between initial training and continuing education. In France, the boundaries between initial training and continuing education are less fluid than in most other European Union countries (*Céreq Bref*, 2006). Indeed, while continuing education (CE) and accreditation of prior learning (APL) were designed to offer 'a second chance school' and the opportunity to return to

⁽⁴⁾ See *The state of education 2006* No 16 page 63, Table 02, showing the proportion of holders of different types of baccalaureate in higher education sectors in 2005.

Figure 4. **Evolution of average expenditure per student (1980-2005) at 2005 prices in euro**



Note: For all abbreviations, see glossary on page 23.

Source: MEN-DEPP

(Ministry of Education - Department of Evaluation, Forecasting and Performance)

Taken from *L'état de l'École 2006 (The State of Education 2006)* - No 16 page 59.

education by having experience accredited, CE continues primarily to benefit better qualified employees while APL seems to fall short of all it promised for social mobility. The same goes for vocational baccalaureate holders, who are most likely to find jobs as manual or white-collar workers on obtaining their diploma. Scarcely one manual or white-collar worker in three had access to vocational training in 2004, compared with half of technicians and supervisors and almost the same proportion of engineers and senior executives. Moreover, access to continuing education increases with the level of diploma: only 13 % of those without any diploma or at best a certificate of primary education (*certificat d'étude primaire*) (30 % of those surveyed) had access to training in 2000, against 51 % of those with the baccalaureate plus three years of study (9.6 % of those surveyed). This means that, instead of converging throughout their working lives, the different socio-economic groups are growing further apart in terms of qualifications.

Table 5. Entry to continuing education by type of diploma (%)

	Entry to continuing education	Proportion of the population
Bac + 3 and above	51.3	9.6
Bac + 2	46.8	10.9
Baccalaureate	36.8	13.2
CAP, BEP	25.0	28.6
BEPC	25.9	7.2
Certificate of primary education or no diploma	12.9	30.3
Did not respond	19.3	Ns
Total	27.8	100

Note: For all abbreviations, see glossary on page 23.

Source: Céreq, January 1999 to February 2000

Table 6. Access to continuing education by socio-economic group (%)

	10 - 19 employees	20 - 49 employees	50 - 249 employees	250 - 499 employees	500 - 1 999 employees	2 000 employees and above	Total
Manual workers	7.9	14.5	26.1	31.8	35.7	41.7	29.0
White-collar workers	11.5	12.0	29.4	35.7	43.3	39.8	29.3
Technicians & supervisors	24.1	30.8	46.6	54.5	60.4	65.7	55.0
Engineers and senior executives	20.1	29.8	47.3	57.6	63.0	64.1	53.2
Total	12.5	19.7	33.9	42.1	49.2	50.4	39.0

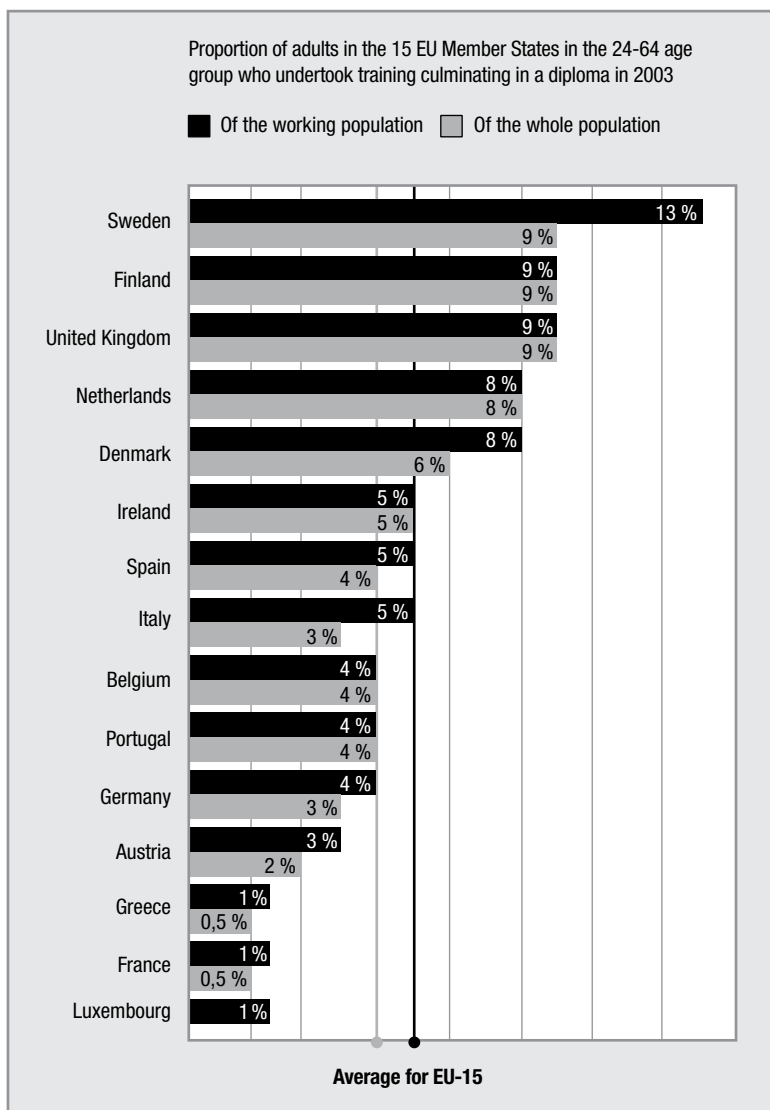
Excluding alternance training, individual training leave (CIF) and professional development contracts (contrats de professionnalisation).

Source: Céreq – *Analysis of employers' 2483 tax declarations for 2004*

This phenomenon also raises the issue of the relationship between the education system and the labour market in France, where the separation between periods of study and periods of work is more marked than in all other European countries. The proportion of adults aged 25 and over who continue in or return to education in order to obtain a diploma – those in formal education or training, to use the European terminology – is lower than anywhere else in Europe (*Céreq Bref*, 2006). As a result, France ranks among the European countries with

the highest proportion of 18-year-olds in education: 80 %, compared with 54 % in the United Kingdom and an average of 75 % for the 15 EU countries in 2003. On the other hand, the average number of years of education that a person in France can expect to receive in their lifetime is relatively low compared with the rest of Europe.

Figure 5. **Formal training in Europe for the 24-64 age group**



Source: Forces de travail 2003 survey. Processed: Céreq 2006.
Taken from *Céreq Bref*, No 235 November 2006, p. 2.

The creation of alternative routes to obtaining a diploma – such as the accreditation of prior learning (APL) – since the implementation of the Social Modernisation Law in May 2004 may offer a partial explanation of this situation stemming from the peculiar split in France between periods of initial and continuing training. The 2004 reform of the French vocational education system was designed to give new impetus to continuing training, an endeavour that was in line with European recommendations. This was particularly so when an individual right to training was established (*DIF, droit individuel à la formation*) entitling employees, on request and with company consent, to benefit from 20 hours of training every year. However, average take-up, i.e. the number of hours of training undertaken in a year divided by the number of employees, increased only from 11 to 12.3 hours from 2003 to 2005. Moreover, very few employees – significant numbers of whom are educated to baccalaureate level – exercise this right compared with the proportion they represent in the working population: only one in four under the 1985 system for validating acquired vocational skills and one in five with regard to the accreditation of prior learning.

Admittedly, this reform is too recent for all of its repercussions to be evaluated. Nonetheless, there is as yet no sign of the explosion in training expenditure and training hours predicted by some experts, which could have benefited those who are least qualified.

Reflections on the effectiveness of vocational secondary education in France as a gateway to higher education

Positive yet modest progress

Access to the baccalaureate and higher education has become more democratic. The introduction of the vocational baccalaureate has been part of this process, born of a readiness on the part of the Ministry of Education, as well as the Ministry of Labour, professional associations and trade unions, to promote vocational training. The implementation of the APL (accreditation of prior learning) has provided evidence of such willingness. However, this progress may be viewed in certain quarters as too tentative, on the grounds that the proportion of vocational baccalaureate holders going on to higher education, whether with immediate or deferred entry, is still

minimal; and because, despite the usefulness and immediate added value of continuing in education, the conditions involved and the price to be paid (in terms of hardship and failure) are problematic. Others, on the contrary, consider that vocational education is being devalued by the new hierarchical system of diplomas created by the baccalaureate. They take the view that as a consequence of the reform, training courses at vocational *lycées* have been reorganised around the new diploma, and so the BEP has become the minimum reference diploma. With this new approach, the CAP is felt to have lost some of its identity and become akin to a 'sub-BEP' diploma. Furthermore, this structure and hierarchical system of diplomas is currently being called into question because the government intends to abolish the CAP and propose a pathway culminating in the vocational baccalaureate over three years (*seconde, première and terminale*, the last three years at a vocational *lycée*) instead of four (two years for the BEP followed by two years for the vocational baccalaureate), with the intermediate diploma (BEP or CAP) included in the three-year pathway. While those who defend the CAP consider this a step backwards, others see it as progress for vocational education to be given a structure as similar as possible to the other baccalaureates.

The vocational baccalaureate: between theoretical rights and genuine access to higher education, what are the ways forward?

Although the vocational baccalaureate gives a theoretical right of access to higher education, in practice – given the options for continuing study available to holders – it is not easy to make effective and immediate use of this right as it stands and the chances of success are fewer than for other types of baccalaureate. In this situation, what paths towards change are possible?

A rationale which highlights the differences instead of the hierarchy between vocational diplomas

By continuing to take an approach which emphasises the hierarchy rather than the differences between vocational diplomas, and by constantly relating them to the dominant model of general education, their specific characteristics can go unnoticed. However, are these difficulties not related to the fact that over a 20-year period (1965-85), vocational education was integrated into the architecture of the education system without any questioning of the

one-dimensional hierarchy of knowledge that so strongly underpins the French education system? The current reform involving the three-year vocational baccalaureate represents a departure from this rationale towards an alternative approach that will require a complete overhaul of the way in which training is divided between the State and employers. Employers will be responsible for training people for specific jobs and the State for more general training, with a reduction in the number of specialisms within the vocational baccalaureate ⁽⁵⁾.

The need for a new approach: reforming the vocational baccalaureate to take three years

The reform of the vocational pathway recently implemented by the government, to become widespread by 2009, has several objectives and is designed to fulfil European recommendations on the promotion of vocational training in the context of lifelong learning. On the one hand, its stated aims include achieving a significant reduction in the number of young people leaving education without qualifications, increasing the number of those obtaining the vocational baccalaureate and making it easier for pupils and the company directors who recruit them to understand the nature of diplomas. On the other hand, in setting out the advantages for pupils of taking a vocational baccalaureate in three years, the reform proposals emphasise that it will facilitate the promotion of vocational education. The vocational baccalaureate will benefit from an increase in status if brought into line with the general and technological baccalaureates, which both take three years on completion of lower secondary school education (*collège*). Furthermore, the reform proposes to reduce the number of different vocational baccalaureate courses available from 95 to 20 specialisms. In addition, current students on technological courses will be split between courses leading to the vocational baccalaureates and those leading to the general scientific baccalaureate with an engineering science and technology option. These changes will mean that pupils completing lower secondary education and going on to the BEP and the vocational baccalaureate will have a higher level of initial training than is the case today.

⁽⁵⁾ This transfer of the vocational component of current training courses to employers may, however, also be viewed as a step backwards, with employers exclusively training young people for specific jobs so that it would be more difficult for such training to be recognised nationally.

The reform could thus contribute to raising the profile of vocational training. Another stated advantage of the reform is that by facilitating access to the baccalaureate, it will guarantee that pupils study right up to baccalaureate level within the same institution, which will reduce the dropout rate. Furthermore, it is thought that the reform will make it easier for people to continue on to higher education (BTS-DUT). This reform will therefore have an impact on access to higher education: future baccalaureate holders will be divided between the *lycées* for the BTS and the universities for the DUT, with holders of the vocational baccalaureate studying for the BTS and students with the general baccalaureate going on to the IUTs.

Conclusion

Now that the vocational baccalaureate has become one of the qualifications required to enter higher education, adjustments need to be made to this system in order to guarantee equal rights for all and to provide genuine opportunities for entry to and success in higher education. The latter is especially crucial in the context of lifelong learning. However, to ensure that the vocational baccalaureate remains a qualification designed to help people into work, only a minority should go on to further study immediately after obtaining it – without, however, closing the door to further study in the future. Thus to guarantee access to higher education, to which this diploma theoretically gives the right, what is necessary is to promote the vocational education pathway (and the current reform aims to address this) and to enhance the effectiveness of lifelong learning (continuing training and the accreditation of prior learning) and career guidance. On the other hand, improving guidance, that is, educating for change and equipping students at the vocational *lycées* to manage the changes they will inevitably face during their education and beyond, will be of vital importance. Indeed, the concept of ‘lifelong learning’ necessarily includes ‘lifelong career guidance’. More than ever, schools must enable their pupils to develop genuine skills in finding their career direction and obtaining information, throughout life, about the opportunities for continuing their education through lifelong learning.

That said, it is true that the reform process is still under way in respect of both continuing training and the vocational baccalaureate, and so it is not possible to give any assessment of whether access to higher education has improved for vocational baccalaureate holders.

At the moment there is considerable debate about the reform of the vocational baccalaureate. As for the measures introduced within the reform of continuing education, which aim to renew the links between learning and working, will they be sufficient 'to push back the boundaries of continuing education and set France on the path opened up by Europe, seeking to create a lifelong education and training continuum?' (*Céreq Bref*, 2006).

Glossary

ALE	Agence Locale pour l'Emploi	local employment agency
APL		accreditation of prior learning
bac ES	<i>Baccalauréat série Économique et Sociale</i>	baccalaureate in economics and social sciences
bac L	<i>Baccalauréat série Littéraire</i>	baccalaureate in humanities
bac S	<i>Baccalauréat série Scientifique</i>	baccalaureate in sciences
bac STI	<i>Baccalauréat série Sciences et Techniques Industrielles</i>	baccalaureate in industrial science and technology
bac STT	<i>Baccalauréat série Sciences et Techniques Tertiaires</i>	baccalaureate in tertiary science and technology
BEP	<i>Brevet d'Études Professionnelles</i>	vocational studies certificate
BEPC	<i>Brevet d'études du premier cycle (du second degré)</i>	certificate of lower secondary education (second stage)
BTS	<i>Brevet de Technicien Supérieur</i>	higher technical certificate
CAP	<i>Certificat d'Aptitude Professionnelle</i>	certificate of vocational aptitude
CFA	Centres de Formation d'Apprentis	apprentice training centre
CEP	<i>Certificat d'Éducation Professionnelle (supprimé en 1992)</i>	certificate of vocational education (abolished in 1992)
Céreq	Centre d'études et de recherche sur les qualifications	Centre for Study and Research into Qualifications
CIF	<i>Congé individuel de formation</i>	individual training leave
CITE	<i>Classification internationale type de l'éducation</i>	International Standard Classification of Education (ISCED)
CPA	<i>Classe préparatoire à l'apprentissage</i>	preparatory class for apprenticeship
CPGE	<i>Classes préparatoires aux grandes écoles</i>	preparatory classes for Grandes Ecoles
CPPN	<i>Classe préprofessionnelle de niveau</i>	pre-vocational class
CPQ	<i>Certificat Professionnel de Qualification, qualification professionnelle, principalement utilisée pour définir les salaires des travailleurs, gérés par les partenaires sociaux, souvent au niveau sectoriel.</i>	certificate of vocational qualification, vocational qualification, mainly used to determine salaries and managed by the social partners, often at sectoral level

DEA	<i>Diplôme d'études approfondies</i>	advanced studies degree
DEP	Direction de l'évaluation et de la prospective (ministère de l'éducation nationale); maintenant DEPP	Department of Evaluation and Forecasting (Ministry of Education), now DEPP
DEPP	Direction de l'évaluation, de la prospective et de la performance (du ministère de l'éducation nationale)	Department of Evaluation, Forecasting and Performance (within Ministry of Education)
DESS	<i>Diplôme d'études supérieures spécialisées</i>	higher specialised studies degree
DEUG	<i>Diplôme d'Études Universitaires Générales</i>	diploma of general university studies
DIF	<i>Droit individuel à la formation</i>	individual right to training
DOM	<i>Départements d'outremer</i>	overseas departments
DUT	<i>Diplôme universitaire de technologie</i>	university technology diploma
ILM		internal labour market
ISO	<i>Norme internationale de qualité</i>	international quality standard
IUT	Institut universitaire de technologie	University Institute of Technology
MEN	Ministère de l'éducation nationale	Ministry of Education
MESR	Ministère de l'enseignement supérieur et de la recherche	Ministry of Higher Education and Research
NVQ		National vocational qualification
PACA	Région Provence Alpes Cote d'Azur	Provence Alpes Côte d'Azur Region
PLIE	<i>Plan Local pour l'Insertion et l'Emploi</i>	local plan for inclusion and employment
PRC	<i>Point Relais Conseil</i>	council contact point
RNCP	<i>Répertoire National de Qualification Professionnelle</i>	national directory of vocational qualifications
SEDOP	Service d'Orientation Professionnelle [mis en place dans le cadre du Programme Régional de Formation du Conseil Régional Provence Alpes Côte d'Azur]	vocational guidance service [established within the regional training programme of the regional council of Provence Alpes Côte d'Azur]
STS	<i>Sections de Techniciens Supérieurs</i>	higher technical courses

National nomenclature of educational levels established by the National Statistical Commission on Continuing Education and Social Promotion

- Level VI:** Those leaving on completion of lower secondary education (6th, 5th and 4th classes) or one-year pre-vocational courses (CEP, CPPN and CPA).
- Level V a:** Those leaving on completion of the general 3rd class, technological 4th and 3rd classes or short-term courses of upper secondary education before the final year.
- Level V:** Those leaving on completion of the final year of short vocational courses or dropping out of long-term general secondary education before the final year.
- Level IV:** Those leaving on completion of the final year of long-term general secondary education or dropping out of post-baccalaureate higher education before reaching Level III.
- Level III:** Those leaving higher education with a qualification equivalent to the baccalaureate plus two years' study (DUT, BTS, DEUG, health or social care training colleges, etc.).
- Levels I and II:** Those leaving higher education with a qualification after the second or third cycle of university education or a degree from a *Grande École*.

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Can ‘vocationalisation’ of education go too far? The case of Switzerland

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Keywords

VET, vocational education and training, company-based apprenticeship, balance between general and vocational education/training, political reforms, VET regulation, VET offer.

SUMMARY

While countries with predominantly academic school-based upper secondary education have been ‘discovering’ vocational education and training (VET) for some time, countries with ‘vocationalised’ education systems such as Austria, Germany or Switzerland are critically reviewing their own situations. This paper takes up the case of Switzerland, which can be considered, in several respects, as a sort of life-size VET laboratory. This contribution aims at critically highlighting particularities, recent developments, advantages and shortcomings of a post-compulsory education system geared as heavily to ‘vocationalisation’ as Switzerland’s.

Introduction

'Vocational education and training enables young adults to make the transition into the working environment and ensures that there are enough qualified people in the future. It is geared to the labour market and is part of the education system' (OPET 2006, p. 3).

This 'official' definition of the purpose of VET in Switzerland – put forth by its main regulating agency, the Federal Office of Professional Education and Technology (OPET) – illustrates how strongly VET is geared to labour market needs. The fact that VET is part of the country's system of education is mentioned at the very end, almost apologetically.

If we try to determine the relevant actors in Swiss VET according to the 'taxonomy' proposed by Wollschläger and Reuter-Kumpmann (2004, referring to Greinert, 2004) (1), a first quick glance at the Swiss VET system will reveal that market economy driven 'vocationalisation' is at its maximum here. As will be further elaborated below, private enterprise has its essential say in regard to all five of the listed points or dimensions, thus exercising a far-ranging power of definition and action in practically all areas concerned.

Key facts and figures

Switzerland has close to 7.5 million residents, living in three distinct linguistic regions: the large majority, about three quarters of them, in the German speaking part, a bit over one fifth in the French speaking part (west/south-west), and about 5 % in the Italian speaking part (central south, mainly Ticino). About one in five residents have a nationality other than Swiss, mostly due to both substantial immigration, and very restrictive naturalisation procedures.

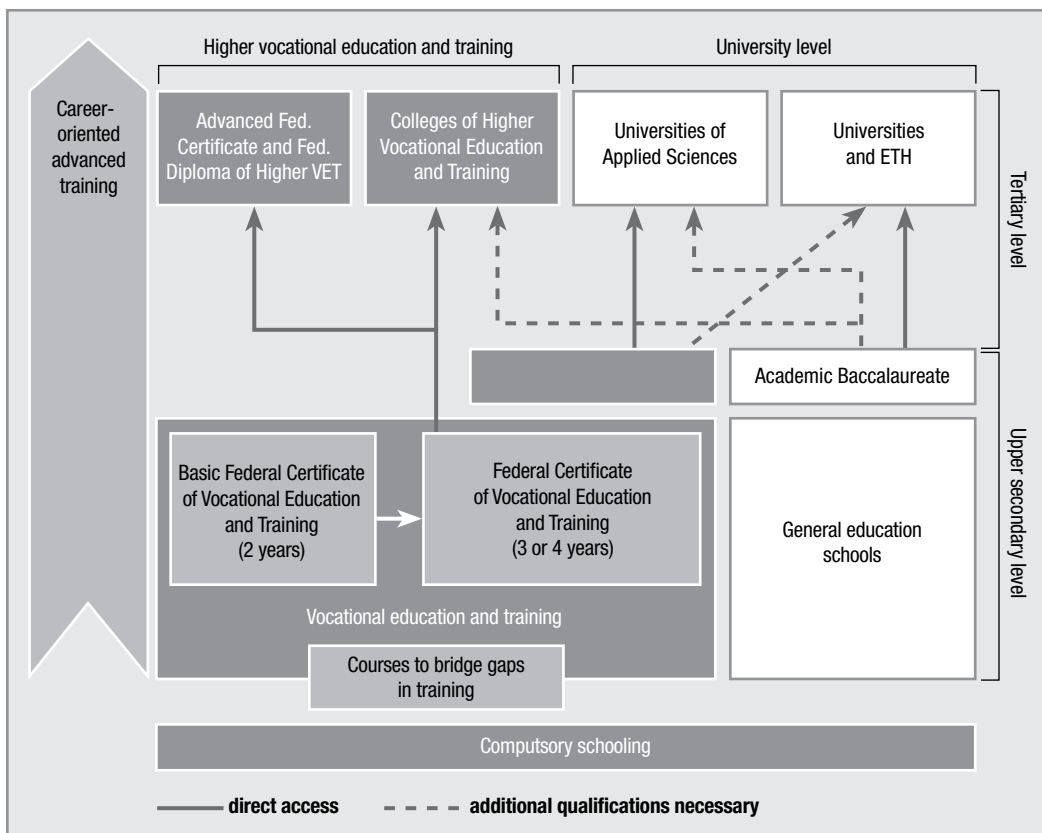
Switzerland is a confederation of 26 cantons. Pre-school and compulsory education is essentially under cantonal jurisdiction. Post-compulsory education and training is regulated, financed and controlled jointly at federal and cantonal levels. The Swiss educational system – or rather systems – accommodate roughly one million students at pre-school and compulsory levels (up to ninth grade), something

(1) 1. Who determines how VET is organised? 2. Where does VET take place? 3. Who determines the content of VET? 4. Who pays for VET? 5. Which gain of VET qualification for which opportunities?

over 300 000 at upper secondary and about 200 000 at tertiary level. Thus, one of the essential features of the Swiss educational system is its relatively small overall size, combined with a high degree of organisational decentralisation.

Switzerland’s educational system is highly selective and seg-regative, characterised by very early tracking. Starting in sixth or seventh grade, lower secondary education is divided in up to four different tracks within one and the same canton – and usually very little permeability between the tracks. As in most selection processes within the lower part of the educational system, the influence of socioeconomic status and family background on the type of tracking is substantial. About one third of all students are enrolled in a lower secondary track or programme summarised

Figure 1. Schematic overview of the Swiss educational system

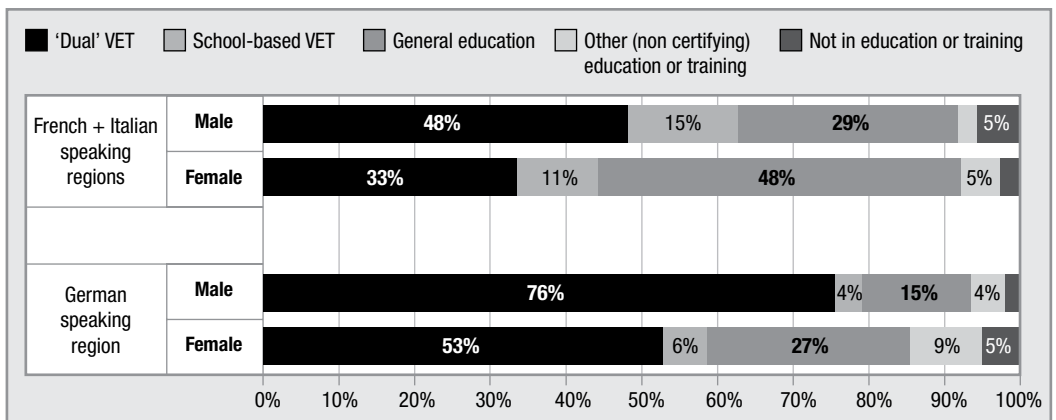


somewhat euphemistically as 'fulfilling basic requirements'. Not very surprisingly, students with a migrant background, low socioeconomic status and/or other family backgrounds unfavourable to learning are heavily over-represented in those tracks. PISA has shown that in early and heavily tracked educational systems such as Germany's or Switzerland's the influence of social background on educational achievement and success tends to be stronger than in 'integrative' systems. Therefore, critical voices have come to label this practice as factual social rationing of education. As point out, the heavy and early tracking on lower secondary level strongly affects the post-compulsory educational options open to students.

Upper secondary completion rate is relatively high in Switzerland, having reached a peak of roughly 90 % at the beginning of the 2000s, but slightly decreasing since. Female and male rates have reached parity, closing a gender gap that was substantial until relatively recently: until the early 1980s, the female upper secondary completion rate did not exceed two thirds, while the rate of young men had already risen above 85 %. Vocational education and training plays a central role in the post-compulsory part of the Swiss educational system. The proportion of vocational versus general education is about 3:1 overall, with strong gender and regional disparities (see Figure 2).

Tertiary level enrolment is relatively weak in Switzerland. Due to substantial expansion of Universities of Applied Sciences (UAS), entry

Figure 2. **Upper secondary pathways by gender and region**
School leavers cohort 1999/2000, situation in second year



Source: TREE.

rates are approaching 40 % today (from under 30 % in the 1990s), but are still considerably below OECD or EU levels (>50 %). Still, only little over 20 % of an age cohort in Switzerland will graduate from education at ISCED level 5A, compared to about one third on average in the OECD ⁽²⁾.

The most common form of Swiss VET at upper secondary level is the company-based or 'dual' form, also known as apprenticeship. As can be seen in Figure 2, enrolment patterns by region and gender suggest a highly segmented and segregated upper secondary sector. If we look at the two contrast categories, young men in German speaking Switzerland and young women in the French and Italian speaking parts of the country, it appears that they face an altogether different reality of numbers and proportions regarding post-compulsory education or training. While Swiss German young men will be found, in three out of four cases, in 'dual' VET, this will be the case for only one third of young women in French/Italian speaking Switzerland. Contrarily, almost half of the latter will be found enrolled in predominantly academically oriented general education, while this is the case for only 15 % of young Swiss German young men.

The border line between the French/Italian part of Switzerland and the German part is not only linguistic, but also marks fundamental system differences. Under the political and cultural influence of its western neighbour, France, general, academically oriented education is given a much higher preference in Romandy, the French speaking part of Switzerland, while VET is perceived more pointedly as a 'second choice'. In the German speaking part of the country, VET has (in public opinion) a more self-confident and 'equal' place within the hierarchy of the educational system (see Geser 2003) .

Gender segregation, which is superposed with these regional differences, can be observed not only between general education and VET, but also within VET, on the level of particular professional orientations. With a few exceptions, gender proportions within a particular profession are strongly biased: towards males in 'crafts', industrial and technical professions, towards females in professions in the social or health sectors.

⁽²⁾ For general statistical information on the Swiss educational system, see system indicators collection on the website of the Swiss Federal Statistical Office SFSO (www.statistik.admin.ch).

Company-based VET is 'dual' in several respects: the term dual first refers to the two learning places, the training company and the professional college. Second, it refers to the duality between practical training and 'academic' learning. Third, it refers to the two collectivities largely responsible for company-based VET: private enterprise and the public sector (which is largely responsible for regulatory aspects and vocational colleges, the 'school' part of dual VET).

'Dual' apprentices' status and situation are closer to those of employees than students: they will usually go through a recruitment process, sign a contract with the training company, and spend at least three days per week on average with practical work and training in the company (for which they receive a modest monthly salary of several hundred euros). The rest of the week is spent at vocational college, 'in school', where the 'general' part of the training takes place. The 'working' perspective is also important for apprentices themselves: if they are satisfied with their apprenticeship (which they are in a large majority), they will consider themselves essentially as 'working' rather than as 'studying', and they will show identification patterns in regard to their training company much like those observed among regular employees.

The dual VET configuration has a fundamental impact on the nature of the school-to-work transition in Switzerland (and other countries with a strong dual VET system). It basically means that for the majority of youth in the country, this transition is already in full development at the interface between lower and upper secondary levels.

Few VET trainees (about one in seven overall) will enrol in school-based VET. As the term says, they will essentially do their training at (professional) school and acquire their practical experience during phases of work placement in private or public enterprises.

At the end of VET, graduates obtain a federal certificate which formally entitles holders to exercise the profession in which they have been trained, and which basically gives direct access to qualified labour in this profession. If a Professional Baccalaureate is acquired in addition to the federal VET certificate, this gives access to further education and training at tertiary level, mostly in universities of applied sciences.

Recent changes and developments

Until the beginning of the 1990s, the Swiss discourse – both political and scientific – about transition to the labour market was virtually non-existent. Transition was not something one worried or argued about, it was something that just happened. Europe envied Switzerland for its low unemployment rate in general, and for its low youth unemployment in particular. The system was generally considered to:

- ensure a high proportion of youth completing upper secondary education and training;
- secure adequate qualification profiles for the future labour force;
- keep youth unemployment low;
- keep transition to the labour market smooth.

Then problems started. First, the country started tumbling through its longest post-war recession. In the process, it became painfully visible how tightly the essentially private enterprise-based VET ‘market’ in the dual system was linked to the labour market as a whole. While demand for VET was rising (for demographic and other reasons), supply, the number of company-based VET places, decreased dramatically.

And as, at the beginning of the present decade, the Swiss economy was slowly recovering from the long crisis of the 1990s, it became evident that the proportion of companies offering VET places had substantially declined. To make things worse, it also became evident that it tended to be the ‘wrong’ type of companies that still did offer VET places: statistics show a strong bias in favour of handicraft and industrial professions, while important segments of the tertiary sector such as ICT are clearly under-represented as far as their share of VET places is concerned.

Despite important reforms of the VET system’s legal basis during the same period, designed to strengthen its position within the educational and economic system as a whole, the shortage of supply of VET places has worsened over time, leaving an ever-growing proportion of youth without an (immediate) educational perspective at the end of compulsory school. This gives rise to dramatic competition among applicants for VET places. Nowadays, almost one in three VET applicants leaving compulsory school have to wait at least one year until they find a suitable training place.

The effects of this displacement process start to show even at macro level. Upper secondary completion rates have been slightly

declining lately (from > 90 % to 87 % in 2004), clearly falling short of the ambitious benchmark of 95 % that Swiss education policy formulated recently (*Leitlinien zur Optimierung der Nahtstelle obligatorische Schule – Sekundarstufe II*, 2006).

Lack of adequate supply of VET places has led to a virtual explosion of all kinds of intermediate training years between lower and upper secondary levels. As can be seen in Figure 1, the government agency responsible for VET, the Federal Office for Professional Education and Technology (OPET), labels these offers somewhat tendentiously as 'courses to bridge gaps in training', suggesting that failing to enter VET directly is essentially a matter of insufficient student achievement. The Swiss youth cohort study TREE (transitions from education to employment), however, has shown that achievement is a relatively marginal factor when it comes to explain why youths do or do not directly enter basic VET (Meyer, 2003).

Despite intense and costly promotional efforts – both at federal and cantonal levels – to increase supply during the past decade, private enterprise has largely failed to follow the government's wake-up call. VET supply has at best stopped declining. A substantial increase in full-time school-based VET to 'fill the gap' seems to be out of the question for political reasons. In the debate, the opinion prevails that VET has to be essentially company-based to be fully functional for labour market needs. This stalemate presently does considerable damage to the adequate functioning of post-compulsory education and training in Switzerland, as it seriously hampers the chances of a smooth transition from lower to upper secondary education and training, particularly for less well resourced candidates. As Hupka, Sacchi et al. (2006) point out, the Swiss VET system not only has a capacity problem, but also a substantial equity problem. Their findings suggest that the structural shortage of VET supply, along with the harsh selection processes it entails throughout transition to post-compulsory education and training, considerably reinforces intergenerational transfer of educational inequality, particularly for the socially 'weak'. They also show that the risk of dropping out is significantly increased by the mere fact (when controlling for all other relevant factors) that youths are unable to gain access to upper secondary education or training within a reasonable time span (within one year after completing compulsory school).

VET and labour market entry

Recent results of the TREE survey (Bertschy et al., 2007) show that transition from basic VET to the labour market still runs rather smoothly in Switzerland. Six years after the surveyed cohort completed compulsory school, seven of eight among those having left education or training have found gainful employment. Youth with a VET certificate have a significantly higher chance to be employed than those without any post-compulsory certification. About half of the cohort had been actively searching for employment prior to the job they held. The average duration of their job search had been approximately three months.

Youths without any upper secondary diploma earn significantly less than those having obtained a VET certificate. TREE results also show substantial income disparities by gender. Under comparable conditions and qualifications, young women earn over 10 % less than men.

Labour market data based on the Swiss census show that among VET graduates in the whole labour force, almost 60 % do not exercise the profession they initially learned during their apprenticeship. As mentioned above, the direction of professional mobility is going from the (secondary) production sector to the (tertiary) services sector, leading to the paradox that a substantial percentage of a strongly 'tertiarised' labour market is initially trained in the industrial production sector. One does not need to go as far as the 'end of the profession', as in the German debate about 'deprofessionalisation' (*Entberuflichung*, see for instance Baethge and Baethge-Kinsky, 1998). Nevertheless, this situation gives rise to the question whether it makes sense to train as many mechanics, bakers or carpenters, if probabilities are high that they will leave their trade or never take it up at all.

Certification versus skills

Owing to its well evolved and widespread VET system, Switzerland has traditionally been among the countries with the highest upper secondary completion rates. When it comes to gauging the substance of VET certificates, the system, however, has but a faint idea of the skills its clients acquire in the process. Basically, obtaining a VET certificate and gaining access to the labour market is considered as sufficient 'proof' of successful training. However, results of IALS/ALL⁽³⁾ suggest that literacy level in Switzerland is weak to moderate for up to 30 % of young adults having completed upper secondary

⁽³⁾ IALS: International adult literacy survey; ALL: Adult literacy and life skills survey.

education (OECD and StatCan, 2000, 2005). Given clear evidence that lifelong learning activities correlate positively with reading literacy (*ibid*), one has to assume that an important part of Swiss VET graduates are seriously handicapped when it comes to maintaining, adapting or improving their skills throughout their careers.

For the weaker contenders in the tough competition for VET places in Switzerland, reform agents put much hope in the new 'Basic Federal VET Certificate' (see Figure 1), a reduced, less demanding form of the full VET certificate, requiring only two years training (instead of three or four). However, adequate supply has yet to be put in place, and again, private enterprise is principally called to see to this. As private enterprises have been generally reducing involvement in VET during the past two decades, development of this new type of VET might fall somewhat short of the high expectations. The need for alternatives is urgent, though, because the consequences of insufficient further qualification, education and training are particularly dramatic for this population, not only for labour market participation, but also for mastery of the complex requirements of (post-)modern life generally.

VET and tertiary education

Until the mid-1990s, access from basic VET to tertiary level programmes (ISCED level 5A or higher) was next to non-existent in Switzerland. In the 1990s, Switzerland's VET system was reformed to strengthen and upgrade VET programmes at tertiary level. To this end, universities of applied sciences (UAS) were set up for holders of a professional baccalaureate (PB). The PB is based on the Federal Certificate by which basic VET is usually completed after three or four years training.

These two reforms have proven to be particularly successful. Today, about one eighth of an age cohort obtain a PB, and UAS participation has considerably contributed to boosting enrolment in tertiary education and training, which was previously extremely low by international standards.

Despite this improvement, tertiarisation of the Swiss system of education is still rather weak compared to most EU or OECD countries. The chances to gain access to tertiary education by way of basic VET are still only a fraction compared to those of graduates from general education programmes. However, labour market indicators suggest that demand for highly qualified labour considerably exceeds (home) supply. In recent years, more than half of labour immigrants to Switzerland held a degree at tertiary level.

Some concluding remarks and questions

Despite several structural and performance problems, the VET system remains the backbone of school-to-work transition in Switzerland. Some structural reforms, particularly the professional baccalaureate and the universities of applied sciences (UAS) have contributed to strengthen the system. However, the system has reached some limits during the past two decades.

One lies in the 'market' conception underlying VET at upper secondary level in Switzerland. Today, upper secondary completion has become the standard of basic education in post-industrial economies. In Switzerland, the percentage of youth envisaging to enter the labour market directly after compulsory school is closing in on zero, while the country's structural shortage of supply of VET places remains substantial. In view of this, the Swiss educational system is confronted with the question: should the solution to this problem be left – as urged by private enterprise and federal VET agencies – mainly or even exclusively to the invisible hand of the market? If not, who else could/should fill the gap? It would be worth reflecting on the adequacy (or rather: necessity) of opening the range of actors offering VET beyond private enterprise. This might not only contribute to solving the problem of 'volume' (substantial increase of the largely insufficient VET supply), but possibly also contribute to attenuate the strong gender and social segregation both at upper secondary level in general and in (dual) VET in particular.

This leads us to the general difficulty of negotiating, defining, and measuring complex skills portfolios such as those found in VET. Little do we know in Switzerland about how exactly they are acquired, why and under which circumstances their acquisition works (well) or not, and what the particular effects of the 'duality' of VET are. Given the large variety of VET organisation in Switzerland, the country could serve as a life-size research lab where these questions could be further investigated.

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After *Abitur*, first an apprenticeship and then university?

Why German *Abitur* holders are taking vocational training in the financial services sector

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SUMMARY

In the financial services sector in Germany the proportion of trainees qualified to go on to university is particularly high. But what induces school leavers not to go (straight) to university? A written survey of over 500 trainees in the banking and insurance sectors examined the motivations for the choice of educational pathway. Only some of the motivations cited in academic debate were mentioned by the trainees surveyed. For those surveyed who were from the financial sector it was not possible to confirm that trainees qualified to go on to university performed relatively poorly at school. Nor was it possible to discover any particularly marked risk aversion. It was more the case that the persons surveyed saw benefits in doing an apprenticeship to keep all their options open and to achieve a good combination of theory and practice. However, those questioned who had no intention of going on to university chose continuing training primarily because, besides being practice oriented, it offers a fast path to affluence and good career prospects.

Keywords

Apprenticeships, Germany, *Abitur* holders [university matriculation certificate holder], school leavers, double qualification, transition

The problem

For many years, transition research has occupied an important position in various academic disciplines, such as labour market research, educational science and even sociology (see, for example, Stern, Wagner, 1999; Ryan, 2001; Behrens, Evans, 2002; Heinz, 1999; OECD, 2000; Descy, Tessaring, 2002, pp. 395-411; Pilz, 2004). There should be no dispute as to the special significance of the transition from school to the labour market, both for the young persons concerned and their parents as well as for the institutions concerned and for the economy and society as a whole.

In the case of Germany, the transition problem can result from defining the terms 'educational system' and 'employment system'. Reference to a transition model is recommended for this purpose. In the past, Germany ideo-typically had a two-stage education system, which preceded the employment system (Mertens, 1976, p. 399). The first stage comprises general education and the second stage comprises initial training. This produces two thresholds at which transition problems can arise. However, such a transition model is increasingly obsolete. Dietrich (2001, p. 422) has the following criticism: 'The theoretical context of the two-threshold model is proving limited in a number of respects. Transition problems in the labour market are only incompletely depicted. [...] The transition from general education in school to gainful employment cannot be adequately portrayed by the threshold concept and the linear transition event it implicitly accepts, and in empirical terms it proves to be a quantitatively significant special case' (1).

One example of a non-linear education pathway, which is also of international interest, is the group of young people in Germany who, after obtaining the *Abitur* (university matriculation certificate), do not go on directly to university (2) but want to do training in the dual system (for full details, see for example BMBF, 1996, 1997; Sauter, Schmidt, 2002; Lipsmeier, 1994; Deißinger, 1996 and Baethge, 2003)

(1) Different educational paths can also be found in the study presented here (see details below). For example, only 56 % of those questioned entered the dual system directly after the end of school. At 31 %, military or civilian service represents the most common intermediate step (this figure is as high as 70 % with reference only to the men).

(2) Against the background of the key questions (see below), no distinction is made here between those entitled to enter university and those entitled to enter *Fachhochschule* (universities of applied science).

and may also go on to university afterwards⁽³⁾. The special focus on this group is due to the fact that, firstly, the presence of *Abitur* holders in the dual system is not a short-term phenomenon (see, for example, BMBW, 1993, p. 162) and, secondly, the group cannot be ignored owing to its size. The absolute figures for those entering training with the *Abitur*, at 80 519 in 2003, 79 000 in 2002, 88 000 in 2001 and 96 900 in 2000 (BMBF, 2005a, p. 91; 2004, p. 76; 2003, p. 83; 2002a, p. 95), are considerable in total. The proportion of all new trainees with the *Abitur* currently stands at 14.3 %, which has remained relatively constant, within a band of fluctuation, over a relatively long period (BMBF, 2005a, p. 91). However, it is not only within the dual system that the group of *Abitur* holders constitutes far more than just a special case. Students who have already completed vocational training are also materially significant within German universities. In 2003 they accounted for 22 % of all those starting university studies (BMBF, 2005b, p. 170)⁽⁴⁾.

If the group of *Abitur* holders proceeding directly to vocational training in Germany is significant, the central question that follows is: what motivates *Abitur* holders not to go to university at all or not immediately after finishing school?

While such behaviour may at first sight appear to be incomprehensible and/or its motivations unclear, the fact is that the existing right to enter academic education is not being exercised (immediately), which is unusual to such a marked degree, particularly in international terms⁽⁵⁾. In particular, the additive double qualification⁽⁶⁾ of apprenticeship plus subsequent university studies is described as, among other things, a waste of time and income for the young individual, a misallocation of educational resources and a misdirection

⁽³⁾ With regard to the European dimension, the focus on *Abitur* students in occupational training may provide substantial impetus for the efforts of various countries to achieve equivalence between general education and vocational training (see, for example, Lasonen/Young 1998; Pilz 2003).

⁽⁴⁾ It must, however, be borne in mind that, in addition to the *Abitur* students who have slotted in an apprenticeship before university, this group also contains persons starting university who first completed an apprenticeship and then became entitled to enter university by following a school-based educational pathway.

⁽⁵⁾ For reasons of space, it is not possible here to discuss in greater detail the depiction of similar double qualification trends in other European countries (on this, see for example Manning 2001).

⁽⁶⁾ Additive double qualifications are characterised by a number of qualification courses completed separately in terms of time and content. On the other hand, in the case of integrated double qualifications, time and content components are combined (see, in detail, Pilz 2003). No account is taken here of integrated double qualifications.

of educational policy because less well-performing school leavers are forced out of the limited training places by the *Abitur* holders (see, for example, Büchel, Helberger, 1995, p. 40 et seq.; Ryan, 2001, p. 77). This impression is strengthened by the fact that in Germany it is generally possible to enter university on the basis of the *Abitur* without any great difficulty and up to now no course fees, or only low course fees by international standards, are charged at the almost exclusively State-financed universities.

Central research questions

Research on the subject outlined is relatively limited in Germany. On the basis of a thorough search of the academic literature, four explanatory models can be generated:

- As a first approach to explaining the educational behaviour, it is assumed that trainees who are entitled to enter university have performed relatively poorly at school and therefore starting university studies holds little promise. This argument is repeatedly put forward (on this discussion see also Lewin, Minks, Uhde, 1996, p. 436 et seq.) at both national and international level (see O.V., 2001).
- The basis for the second assumption is that the group of double qualifiers (apprenticeship plus university studies) is highly risk averse as regards not only success in studies but also the transition to the employment system, and that this group would therefore either start a training course exclusively, or else as an initial step (see, for example, Büchel, Helberger, 1995). In this sense, vocational training, which provides good prospects for entering the labour market later on, is seen as a safety net (Shavit, Müller, 2000, p. 446 et seq.).
- The third hypothesis is again directed at the double qualifiers, and in this case at the aspect of interest in the content and the practical experience conveyed by apprenticeship. It is assumed that an apprenticeship is attractive to *Abitur* holders particularly because it provides important practical experience initially, which can then possibly be supplemented by predominantly theoretical topics at university (Lewin, Minks, Uhde, 1996, p. 432). In this context, it can also be assumed that the apprenticeship is useful for vocational guidance and at the same time keeps all education options open (Greuling, Behrens, Pilz, 2007).

- As a fourth assumption, it is noted that the members of the subgroup of trainees who are entitled to go to university but who do not aspire to university studies assume that initial training extended by corresponding continuing training will give them a faster career than university studies will (Krekel, Ulrich, 1996).

In addition to those frequently mentioned aspects, other potential justification models for behaviour in choosing education could be discerned and accordingly taken into account in the survey. Financing, opportunities for mobility and study, as well as parents' educational background and social position, are cited as factors influencing behaviour in choosing education (see, for example, Lewin, Minks, Uhde, 1996, pp. 435-38 and Büchel, Helberger, 1995, p. 35 et seq.)⁽⁷⁾.

Sample and method

The training of *Abitur* holders in the dual system is concentrated on a few occupations and predominantly on the commercial/administrative sector. Thus, 50.7 % of all trainees entitled to pursue university studies are trained in only ten different occupations. Consistently over many years, the highest proportions of *Abitur* holders have been trained in banking (*Bankkaufmann*) and insurance (*Versicherungskaufmann*). Industrial management (*Industriekaufmann*) is another quantitatively significant training occupation, but because of its generally broad distribution, *Abitur* holders make up only 40 % of the total. In all other training occupations, particularly craft occupations, there are only small numbers of *Abitur* holders. Only IT (*Fachinformatiker*) and hotel management (*Hotelfachmann*) differ from the traditional field of management/administration in having a considerable proportion of *Abitur* holders (BMBF, 2004, p. 77 and 2005a, p. 91 et seq.)⁽⁸⁾.

It was therefore banking trainees who were chosen as the investigation group because, with 8 143 new trainees entitled to

(7) The influence of the parents' educational level on educational behaviour, which had been established in other investigations, to the effect that those with dual qualifications tended to come from parental homes with no academic background (see Lewin/Minks/Uhde 1996, p. 435 et seq. and Büchel/Helberger 1995, p. 35 et seq.), was not the direct subject of the investigation in this case. However, it is apparent from the data obtained for dual qualifiers that a (subjectively perceived) influence by parents on the decision on educational options made by the persons questioned tends not to occur.

(8) The commercial and administrative sector also predominates among those commencing studies who have previously undergone training (BMBF 2005b, p. 171).

go to university, it was the most significant training occupation in absolute numbers in 2002, and with 55 % of new trainees being *Abitur* holders, it was one of the most important training occupations for *Abitur* holders ⁽⁹⁾. Although the training occupation *Versicherungskaufmann/-frau* was substantially smaller in absolute numbers in 2002 with 2 891 new trainees entitled to pursue university studies, it too had one of the highest proportions of new trainees who were *Abitur* holders, 52.4 % (BMBF, 2004, p. 77), and it was therefore also included in the investigation group ⁽¹⁰⁾. Another reason for focusing on the financial sector was its relatively balanced sex ratio and highly uniform training quality, leading to largely identical opportunities in terms of subsequent career decisions for those who complete their training (see Jacob, 2004, p. 213).

A total of 551 trainees from the banking and insurance sector who had first acquired an entitlement to enter university were questioned in the period 2002/2003, the emphasis being on trainees in the second half of their training course. Results capable of analysis were provided by 517 questionnaires, of which 440 came from the Greater Hanover area and the remainder from three other regions in Germany ⁽¹¹⁾. Altogether, 320 of those questioned came from the banking sector, corresponding to about 1.3 % of the total number of trainees with *Abitur* in this sector in the whole of Germany, and to about 2.7 % in relation to the last training year investigated. It was possible to assign 198 trainees with the *Abitur* to the insurance industry, corresponding to about 2.5 % of the total number of trainees with the *Abitur* in this sector in the whole of Germany and about 6.1 % in relation to the last training year investigated (see BMBF, 2005a). Of the 517 persons, 453 stated that they had not ruled out subsequent university studies at the start of training (see details below). At the time of the survey 46 % of those questioned were

⁽⁹⁾ The significance of the internal company programmes for dual qualification, which are well known in the banking sector (training course plus financed course of study followed by return to the company), was taken into account in the investigation but did not play a particularly large role (see below).

⁽¹⁰⁾ In spite of the focusing on dominant occupations, the results obtained cannot automatically be generalised in respect of trainees in all occupations requiring training who are qualified to go to university, as different reasons (e.g. taking over the parental business) could be highly relevant in, for example, the crafts sector. In order to clarify this, it is necessary for there to be greater differentiation in the research approaches.

⁽¹¹⁾ With regard to the relevant year for the start of the training course, 2000, a sample was therefore obtained that was 0.53 % of the basic total. Consequently, the findings, for this statistical reason also, are not representative of all trainees entitled to go to university.

aged from 18 to 21, 49 % were aged from 22 to 25 and the rest were older. At 57 % of the total sample, women were in a slight majority in the survey.

The anonymous survey was carried out in vocational schools by means of questionnaires, using mostly closed questions. In addition to asking about personal details and study plans, a four-point scale was used with regard to the motivation for the choice of educational pathway (see below for details of all questions asked about reasons). For each individual item, the subject was required to state the level of agreement or disagreement. Because of the lack of appropriate questionnaires specific to the target groups (as an exception, see Halbig, 1990), independent operationalisation was undertaken on the basis of the four central research questions (see above). Reference to the items used by HIS (Hochschulinformationssystem GmbH) (Heine, 2002, p. 28) to investigate the motivations for the choice of university studies or training proved helpful in some sub-areas, as did the partial opportunity to adapt corresponding questions from the area of research into choice of occupation (see, for example, Bußhoff, 1984) ⁽¹²⁾. To increase the validity of the data obtained, a corresponding preliminary test was carried out with just under 50 school children ⁽¹³⁾.

Results

The evaluation of the questionnaires revealed that the average *Abitur* mark was 2.69 ⁽¹⁴⁾. By comparison, according to official statistics, the average *Abitur* mark of all *Abitur* holders was about 2.5 (see Heinen, 2002, p. 20). Accordingly, with regard to the first question, *Abitur* holders in apprenticeships had on average somewhat poorer school results from their previous general education, but only to a slight extent (for similar findings, see Lewin, Minks, Uhde, 1996, p. 436).

⁽¹²⁾ However, because of the different level of complexity (see the four questions central to the research) no direct recourse to empirical works on motivation theories was possible.

⁽¹³⁾ The individual tasks were discussed with the participants after the test had been taken, and problems in understanding the test were discovered. In a further stage, the subsequently modified test was submitted to two researchers who were empirically active in the field of research into occupational aspirations, and their suggestions were incorporated.

⁽¹⁴⁾ In Germany, the scale of marks runs from 1 to 6, with 1 representing the best mark and 6 representing the worst mark.

Analysis of the *Abitur* performances in different types of company (see Table 1) reveals above-average results in the savings bank/regional bank sector, followed respectively by the cooperative banks and corporate banks. In the insurance sector, by contrast, the marks are generally worse on average. Within this group, the insurance brokers, with an average of 2.74, stand out slightly. However, this involves only five people.

Table 1. **Average *Abitur* marks by type of company**

Type of company	Mean figure	No	Standard deviation
Savings bank, regional bank	2.55	84	.4800
Cooperative bank (e.g. credit unions)	2.58	49	.5257
Corporate bank/major bank	2.58	140	.5147
Post Office bank	2.66	15	.5627
Other banks (e.g. private banks)	2.60	32	.4938
Insurance (primary insurers) – office staff	2.88	133	.4150
Insurance (primary insurers) – sales staff	2.85	47	.4903
Agency business	2.84	9	.5897
Reinsurers	2.80	3	.3464
Insurance brokers	2.74	5	.4615
Total	2.69	517	.5005

As already mentioned, 453 trainees (87.6 %) did not rule out going on to university subsequently, while 64 trainees had already rejected this option at the start of the training course. An evaluation of the *Abitur* results in relation to the decision in favour of or against university studies shows that those who ruled out going on to university had a mark of 2.71, which is slightly below the average. Those who did not exclude university studies had a mark of 2.69, in other words above average. This shows only a slight correlation of 0.016 as measured by eta. Consequently, no further significant differences can be ascertained in this case. In total, 86 % of the female trainees do not, before commencing their training, rule out university studies. In contrast, the corresponding figure for their male colleagues is 89.8 %.

The average *Abitur* mark of the female trainees who do not rule out university studies is 2.62, which is slightly below the gender-specific average of 2.63. In the case of the female trainees who do rule out university studies, the average is 2.67. In the case of

the male trainees who have not ruled out going on to university the average is 2.77. For those who have ruled out university studies, the figure is 2.78.

A slight correlation therefore emerges between above average *Abitur* results and the tendency for trainees, prior to training, not to rule out university studies ⁽¹⁵⁾. At the same time, the data for this study demonstrate that, at the start of the training, women are more likely than men to rule out university studies (14 % of the female trainees and 10.2 % of the male trainees rule out university studies).

The replies given by the persons surveyed who had not yet ruled out university studies at the start of their apprenticeship concerning their motivations for starting vocational training are set out below and ordered by level of agreement (see Table 2) ⁽¹⁶⁾.

In first place comes the belief, on the part of those questioned who had the option to pursue university studies, that the combination of training and university studies gives them better career prospects. In second place comes the possibility, through training, of keeping all options open in terms of subsequent university studies, followed by the wish to gain practical experience first and the desire to earn some money. All other options encounter far less strong agreement. The questions about not having a place at university and not wanting to leave the home town were disagreed with most strongly.

The risk aversion hypothesised in the second central research question is not clearly apparent, as there was a tendency to disagree with the relevant question (see No 6 in Table 2).

However, the data supports the third assumption: the combination of training and university studies in particular is regarded as a better career prospect than university studies alone. At the same time, still having the option to go on to university is considered to be a clear advantage, and emphasis is placed on the acquisition of work experience and practical insight into an occupational field, which provides guidance ⁽¹⁷⁾.

⁽¹⁵⁾ A more precise statistical investigation by means of a multivariate procedure could corroborate this tendency both in the case of women and in the case of men.

⁽¹⁶⁾ The reliability of the variables was tested statistically and can be regarded as given (Cronbach's Alpha 0.678).

⁽¹⁷⁾ It is interesting that only 9.5 % of those questioned in this group stated that they saw further company training with the additional acquisition of an academic qualification within an internal company qualification plan as being an option. The investigation was, however, unable to determine whether such programmes were not offered by the companies or were not accepted by the trainees. Nevertheless, in view of the findings that have been obtained, such programmes could acquire particular significance in order to ensure that the younger staff members in the companies are highly qualified.

Table 2. Strength of the motivations of the trainees who had the option to pursue university studies (double qualifiers) for choosing training (ordered by level of agreement)

Position	Motivations	Mean values of the answer categories
1	A training course in combination with university studies offers better career prospects than just university studies.	1.65
2	I want to keep all my options open. After all, I can still decide in favour of university studies.	1.70
3	After school, I want some practical knowledge of the world of employment first.	1.83
4	I'd like to earn some money first.	1.98
5	I didn't know what I should study. By giving me insight into an area of employment, the training therefore offers me guidance.	2.94
6	I am unsure whether I can manage university studies. Doing a training course first provides security in case I break off university studies.	3.05
7	I (or my parents) cannot at present finance university studies.	3.49
8	The company providing my training has offered me a combination of training and sponsored university studies.	3.67
9	Although I would have preferred university studies straight away, my parents recommended doing the training course to me.	3.73
10	I didn't know what I wanted to do. I applied for university studies and also for a training course. The matter was decided by chance (e.g. because I was accepted first by the company providing the training).	3.77
11	I felt I was still too young for university studies.	3.79
12	In order to go to university, I would have had to leave my home town. I did not want to do that yet.	3.85
13	I did not receive a university place immediately and I do not want to be left with nothing to do.	3.86

Key: Answer categories 1 = complete agreement, 2 = partial agreement, 3 = partial disagreement, 4 = complete disagreement

Thus, the data relating to the outstanding importance of practical experience obtained here in respect of a particular target group confirms the findings of other investigations (see, for example, Bausch, 1997, p. 15 and Lewin, Minks, Uhde, 1996, p. 437).

A gender-specific differentiation (see Table 3) demonstrates, by comparing the items with which there is particular agreement, that typically the differences regarding the motivations for ruling out subsequent university studies are small ⁽¹⁸⁾.

Table 3. Differences in key motivations for trainees with the option to go on to university, by gender

Position and answer category	Gender (mean values)		
	Female	Male	Overall
1 Combination of improved job opportunities	1.66	1.65	1.65
2 Keep all options open	1.64	1.78	1.70
3 Gain practical experience first	1.75	1.92	1.83
4 Earn some money first	1.88	2.09	1.98

Key: Answer categories 1 = complete agreement, 2 = partial agreement, 3 = partial disagreement, 4 = complete disagreement.
The mean values of the answer categories are shown in ascending order.

The same applies to the distinction between banking and insurance trainees (see Table 4). The higher level of agreement (lower mean value) expressed by trainees in the insurance industry with the motivation of wanting to earn some money first may be due to the fact that in the insurance sector, unlike the banking sector, it is usually possible to earn a higher income owing to the commission payments made on top of the training salary.

Table 4. Differences in key motivations for trainees with the option to go on to university, by training occupation

Position and answer category	Gender (mean values)		
	Female	Male	Overall
1 Combination of improved job opportunities	1.62	1.71	1.65
2 Keep all options open	1.75	1.63	1.70
3 Gain practical experience first	1.84	1.80	1.83
4 Earn some money first	2.05	1.85	1.98

Key: Answer categories 1 = complete agreement, 2 = partial agreement, 3 = partial disagreement, 4 = complete disagreement.
The mean values of the answer categories are shown in ascending order.

⁽¹⁸⁾ Further statistical investigations have produced no significant differences between the results obtained from Hanover and the control regions.

In the case of the group of persons questioned who had already ruled out university studies at the start of their apprenticeship, the answers can also be ordered according to the level of agreement (see Figure 2).

Figure 2. Strength of the motivations of the trainees with no option to pursue university studies for choosing training (ordered by level of agreement)

Position	Motivations	Mean values of the answer categories
1	I want to earn a lot of money as quickly as possible and achieve a high standard of living.	1.76
2	I am more practically oriented. University studies are not for me.	1.93
3	I think that I can make a career for myself more quickly with the training course and corresponding continuing training than through university studies.	2.17
4	It is not possible for me personally to finance university studies.	2.84
5	I think that I would be too old for the labour market after university studies.	2.85
6	I cannot find a subject to study which accords with my interests.	3.12
7	My professional prospects are predetermined even without university studies (e.g. in the family firm or similar).	3.21
8	I do not have the time for lengthy university studies (e.g. because of family).	3.23
9	I am afraid that my performance will not be sufficient to complete university studies.	3.25
10	In order to study at university, I would have to leave my home town. I do not want to do that.	3.40

Key: Answer categories 1 = complete agreement, 2 = partial agreement, 3 = partial disagreement, 4 = complete disagreement.

In the case of trainees who do not have the option of pursuing university studies, it is the motivation of earning a lot of money as quickly as possible and achieving a high standard of living which is strongest, followed by a somewhat practice-oriented assessment of themselves and better career prospects as a result of the adopted qualification route. All the other specimen answers lag far behind in terms of agreement. The strongest rejection is attained by the

aspect of leaving one's home town, as in the case of the group of those wanting to study.

Willingness to relocate therefore does not play a major role in deciding against university studies per se or in deciding to do a training course beforehand.

A possible lack of ability, entailing the risk of dropping out of university, is also rejected by those who do not wish to go on to university.

With regard to the fourth central research question, it can be said that those questioned who did not intend to pursue university studies consider that they will realise their career opportunities faster through relevant continuing training than by going to university ⁽¹⁹⁾.

Here too it is demonstrated, by comparing the items with which there is particular agreement, that gender-specific differences and deviations in relation to the training occupation are somewhat marginal (see Table 5 and Table 6) ⁽²⁰⁾.

The stronger motivation among men to earn money and the career guidance through continuing training and practical orientation in insurance companies can again be explained, at least in part, by the job profiles in the insurance sector: it is particularly men who work here as sales representatives and they are paid by results, at least in part, by means of the signing-up bonuses. Careers in the sales force of insurance companies are also very much dependent on success in arranging insurance products, which also requires in particular the specific product knowledge conveyed in continuing training.

Table 5. Differences in the key motivation among trainees with no option to pursue university studies, by gender

Position and answer category	Gender (mean values)		
	Female	Male	Total
1 To earn money quickly in order to achieve a high standard of living	1.83	1.65	1.77
2 Rather practically oriented	1.93	1.96	1.94
3 Faster career through continuing training	2.32	1.91	2.17

⁽¹⁹⁾ It could also be relevant in this respect that the banking and insurance industry in Germany, through its respective associations, possesses developed and recognised continuing training systems, e.g. in the field of specialist training (Brötzig; Dorsch-Schweizer; Haipeter 2006).

⁽²⁰⁾ No significant regional differences were to be found in this case either. The degree of reliability of the variables in this case, however, is smaller compared to the findings for those with double qualifications (Cronbach's Alpha 0.452).

Table 6. Differences in the central motivations among trainees who did not have the option to pursue university studies, in terms of the training occupation

Position and answer category	Occupation providing training (mean values)		
	Banking	Insurance	Total
1 To earn money quickly in order to achieve a high standard of living	1.79	1.73	1.77
2 Rather practically oriented	2.03	1.81	1.94
3 Faster career through continuing training	2.29	2.00	2.17

Discussion of the results

In contrast with the need for security as a decisive motivation for a double qualification, which has been found in other studies (see, for example, Krekel, Ulrich, 1996, p. 6 and Lewin, Minks, Uhde, 1996, p. 437), strong risk aversion was not found in the present investigation of training occupations in the banking and insurance system. It is rather the case that both the double qualifiers and also the *Abitur* holders who do not intend to go on to university are distinguished by their single-mindedness in planning their careers. Those questioned who did not intend to pursue university studies in particular aim to achieve a high income and career prospects through a combination of apprenticeship and continuing training. In the case of those who are doubly qualified, monetary aspects also play a role but in a different respect: for future students (who would then normally have only a low regular income or none at all) the relatively small training salary, by comparison with the regular income, could be quite attractive for a limited period ⁽²¹⁾. The optimisation of career prospects is also very important for double qualifiers. For this group, optimisation is intended to be through the acquisition of practical experience as a basis and as orientation

⁽²¹⁾ Educational studies show that a dual qualification strategy is not worthwhile in relation to lifetime income (see, for example, Jansen 1997; Büchel/Helberger 1995, p. 39). In relation to all German trainees in the dual system, it can be interpreted as rational to do without income that is immediately available as unskilled labour, firstly because access to permanent employment without completing a training course has become increasingly difficult in recent years in Germany and secondly because doing without income now is more than compensated for by the prospect of a substantially higher and more permanent salary as skilled labour, which is normally protected by collective bargaining.

for subsequent university studies. Contrary to this assumption, however, academic findings show that there is little or no difference between those with a double qualification and university graduates with no training in terms of the risk of unemployment, the position held in the employment system and the pay received (Bellmann et al., 1996; Büchel, 1997; Bausch, 1997; Büchel, Helberger, 1995; Lewin, Minks, Uhde, 1996, p. 437).

Relevance to practice in training also plays an important part for those who do not wish to go to university. However, whereas for the double qualifiers practical experience serves as a basis for theory, for those who do not wish to go to university it is the congruence of individual inclination in the form of practical ability and the practical training that is of central importance.

To conclude, if these findings are considered against the background of the shaping of initial vocational training in Germany and are placed in the European context, the stratification in the dual system forms a central element.

The concept of stratification, firstly, delineates the segmentation of an educational system (Shavit, Müller, 2000, p. 443 et seq.; Descy, Tessaring, 2002, pp. 395-411) and, secondly, can also be used to describe the options for allocating merits in the educational system and/or the employment system through particular educational pathways (see Blossfeld, 1994; Alexander, Pilz, 2004, pp. 750-753). It is apparent in the latter function that, particularly in the financial services sector, career advancement in combination with a correspondingly high salary and demanding work are certainly obtained through the dual system, even if key positions in this sector also tend to be reserved for university graduates (Herget, 1996; Krekel, Ulrich, 1996).

The learning of theory and practice within the dual system forms an important basis for this. The assumption of demanding work, as laid down in the training regulations, such as detailed advice to customers about financial investment, is theoretically reflected and underpinned at a correspondingly demanding level in the academic context (Ettmann, Wurm, 2002; Böhner, Straka, 2005). Individual training components can even lead either to a credit at the universities (e.g. bookkeeping) or else constitute a good base for the expansion of specialist knowledge.

In this connection, the thesis frequently put forward by the OECD that the proportion of students in Germany is too small by international standards (see EDK et al., 2003) should also be

qualified. Comparative studies tend to show that training in the German dual system is very demanding and sometimes reaches the academic level in a number of other countries (for example, see, in general, Richter, 1996; Steedman, 1998, pp. 84-92 and, specifically for the commercial sector, Fulst-Blei, 2003).

With regard to the European dimension, the debate about *Abitur* holders in the dual system ultimately opens up another perspective that is relevant for the future. In December 2004, the education ministers of 32 European countries decided to establish a European qualifications framework (EQF) which, as a meta-framework, is intended to make the national qualification frameworks compatible with one another. At present, eight different stages are planned, each stage being defined by the three learning outcome areas of knowledge, skills and personal and job-related competences, together with additional notes (Sellin, 2005, pp. 11-18). In Germany, the discussion about the design of a national qualifications framework is very passionate at present (see, for example, Principal Committee of the German Federal Institute for Vocational Training (BIBB), 2005; Sellin, 2005). Overall, no completely positive assessment of the developments can be found (see Drexel, 2005). In particular, it should be noted that the monolithic dual system, without any gradation and without different access levels, would be much more strongly affected by a differentiated EQF than a system which is already flexibly designed with gradations exists, for example, in the UK in the module design (see Severing, 2005, p. 11 et seq.). Consequently, it would be necessary to discuss whether and how the various training occupations covered by the German Vocational Training Law (*Berufsbildungsgesetz*) should be allocated to different levels. Any such allocation would take up and formally establish existing differences in the dual system with regard to the characterisation of 'training occupations for *Abitur* holders' on the one hand, and 'training occupations requiring secondary school education', on the other (see BMBF, 2005a, pp. 88-93). It would also be conceivable in this connection to differentiate a training occupation at different level stages, as has been done for example with the British NVQ/SVQ sector (SQA, 2005; Pilz, 2002a, 2002b). In addition to various reservations relating to education policy, formal legal problems and friction relating to collective bargaining, the development of allocation criteria on the basis of which the level-specific allocation of corresponding competence elements from the training regulations and the framework curricula can be undertaken might also represent a particular challenge (Breuer, 2005).

Finally, from a European perspective, one can also ask how the two other German-speaking countries with a long training tradition deal with *Abitur* holders. The *Berufsmaturität* (vocational matriculation examination) in Switzerland and the *berufsbildende höhere Schulen* (vocational upper secondary schools) in Austria very successfully offer an inclusive combination of final apprenticeship qualification (*Lehrabschluss*) and university entrance qualification in a unitary educational pathway (Seitz, Metzger, Kobler, 2004; Archan, Mayr, 2006). In Germany, on the other hand, inclusive double qualifications to obtain the *Abitur* and an apprenticeship qualification at the same time exist only in negligible special forms (Pilz, 2003). However, forms linking vocational training and university studies for young people who are already qualified to enter university are more developed in Germany. For example, the *Berufsakademie* (college of advanced vocational studies) offers the possibility of linking university studies and apprenticeship (Deißinger, 2000), and many combined qualification programmes exist for *Abitur* holders, organised for example by finance companies (see Brötz, Dorsch-Schweizer, Haipeter, 2006, pp. 64-68) ⁽²²⁾.

With this in mind, there are certainly lessons to be learned from the experiences of other European countries so that German students who are intending to pursue university studies and are at the same time practice-oriented can also have an attractive choice which would have advantages over the status quo from the point of view of the individual and the economics of education.

⁽²²⁾ However, in the investigation which has been presented, a qualification path of this kind could be found only in fewer than 10 % of those questioned (see Table 2, item 8).

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Two worlds? Higher education and post-school VET in Australia and the movement of learners between them

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SUMMARY

Keywords

Learning pathways,
cross-sectoral transfer
(or transition), student
movement, tertiary
education, motivations
to study, lifelong
learning

Relationships between higher education and VET are significant and complex, and of increasing interest in many countries. Most analyses focus on systems, policies and structures. This paper takes a different perspective: what are the learners doing and thinking? It is based on data from research on students commencing study in one sector with experience of study in the other sector. It analyses their characteristics, motivations for study, how they experience study in both sectors and how they perceive their moves. The paper finds that, for these students, their learning trajectories are more circuitous than linear, which raises issues concerning seamlessness, equity and efficiency. Yet pathways are possible, are being used and allow for flexibility. The two educational sectors may be seen as parallel worlds. However, a more apt metaphor may be as tectonic plates creating convergent boundaries. The paper concludes that their relationships require serious rethinking.

Introduction

Educational policy reform in many countries is aimed at expanding provision of and widening participation in tertiary education. This reform is fuelled by such factors as the drive towards a knowledge economy and society, pressures to overcome skill shortages, desire to provide pathways for individuals to become more informed citizens, policy directions on social inclusion, and indeed, the competition generated through international benchmarking. Initiatives in these areas align with global trends emphasising change, flexibility, weakening of boundaries and the importance of lifelong learning (Young, 2006). While respective emphases may differ from nation to nation, depending on histories, cultures and economies, the effect is to highlight the nature and significance of, and relationships between, various sectors of tertiary education.

The growing complexity in relationships between tertiary education sectors is being progressively underlined in research. For example, Hall and Thomas (2005, p. 183) have explored a range of challenges relating to what they term trans-sector collaboration, and the characteristics of collaborative schemes and how they might be enhanced. Other studies have reported on institutions developing materials for assisting students in their transitions (Knox, 2005), and on strategies for creating a more integrated system of tertiary education (Gallacher, 2006). The ongoing challenges, however, have led Broughton (2005, p. 145) to conclude that, 'at the same time as cross-sectoral pathways are being advocated as a good thing, the "space" for initiatives that build on the concept is shrinking'.

A key characteristic of this complexity in sectoral relationships is the preoccupation with structural matters. Studies heavily focus on the importance of articulation and curriculum issues between post-compulsory institutions (Knox, 2005; Harreveld, 2005; Keating, 2006), attempts at blurring boundaries between sectors (Grubb, 2006; Gallacher, 2006) and differences in accreditation arrangements (West, 2006). Further studies interrogate the notion of seamlessness between educational sectors, and continue to acknowledge there are 'unresolved issues' (Hall and Thomas, 2005, p. 1) and 'unresolved tensions' (Keating, 2006, p. 59). In fact, Young (2006, p. 5) raises the question of whether 'seamlessness is at heart anti-educational because it fails to take account of the specificities of different types of learning and knowledge'. In Australia, the Department of Education, Science and Training (2002, p. 3) has proclaimed that the way forward

is to strengthen inter-sectoral links, promote 'clear and easy pathways between VET and higher education' and to develop 'a national system that underpins educational choice', yet acknowledges that 'significant barriers remain ... [including] fundamental differences in learning and assessment'. Similarly, the national strategy for vocational education and training 2004-10, *Shaping our future*, also recognises that, although pathways between educational sectors have improved, barriers still exist between vocational education and training and universities (ANTA, 2003). The three main barriers, according to the House of Representatives' Standing Committee on Education and Training (2004), are funding, inadequate credit recognition and transfer arrangements, and administrative issues.

This focus on structural considerations was also in evidence at Agora XXV, convened by Cedefop in Greece on higher education and VET, where discussion centred heavily on systemic issues, so significant in the European Union at this time – such as qualification frameworks, resources issues and priorities, accreditation, integration of VET and higher education, alternating training, the Bologna process, and roles of social partners. Little was heard about learners, a point highlighted by the European Students' Forum representative. Yet a quite different perspective on relationships between higher education and VET may be gained by focusing on learners and asking: what are the learners doing and what do they think?

This paper takes up this challenge. It attempts to illuminate the relationship between higher education and VET through examining the movement of learners in these 'two worlds' in Australia. The title ascribed to the author's presentation at Agora XXV was 'parallel worlds' – but are they? The two sectors have recently been depicted as institutionally separated (Keating, 2006, p.64) and bifurcated (Moodie, 2003, cited in Keating, 2006, p. 68) – but are they?

The 'two worlds' in Australia

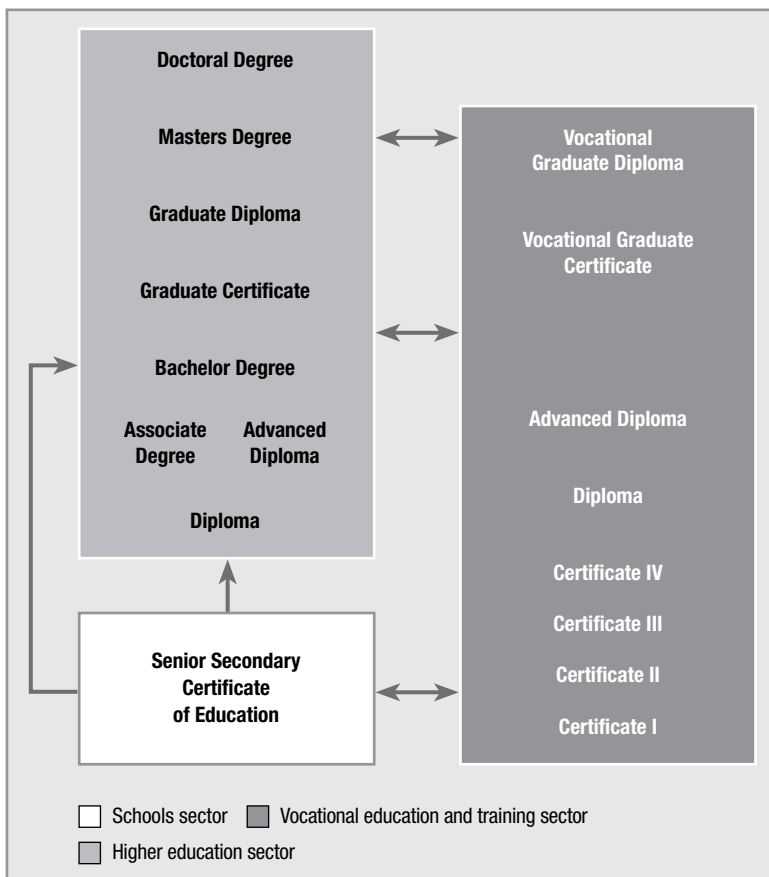
Higher education (HE) and vocational education and training (VET) are two significant sectors of tertiary education in Australia (the third is the adult and community education (ACE) sector which lies outside the scope of this article). The higher education sector is dominated by the 39 universities, though there are increasing numbers of private higher education providers. These institutions provide degree and higher level programmes in professional, para-professional and general education, such as the physical sciences, medicine, engineering, teaching, law, the health sciences, arts, social work and so on. Students most often

study full-time, and programmes are usually three to six years. The VET sector embraces the majority of institutions and programmes that lie between secondary school and higher education (though an increasing amount of VET does now occur at the secondary level). This sector is comprised of 57 public technical and further education institutes, together with a large number of private training organisations such as commercial training providers, industry organisations and enterprise-based providers. The sector provides programmes, predominantly certificates, diplomas and advanced diplomas, in a very wide range of studies, from trades to liberal arts. Students most often study part-time, in programmes usually from one to three years (for further information on the VET sector, see NCVET 2007). The sector's focus is skills and knowledge for work, and Moodie (2003, p. 2) claims that the Australian VET system's skills development role is 'like much of continental Europe'. In comparison, the specialty of the universities is general education and for high status occupations. Thus, the two sectors have tended to serve 'different sets of clients and occupations', largely because of the impact of economic policy and the structures and cultures of the secondary school sector (Keating, 2006 provides an excellent analysis of the 'radically different currency' of the two sectors, pp.62-72).

The programmes provided by each of the sectors are as shown in Figure 1, clustered according to the sector which is responsible for their accreditation. Higher education offers diplomas to doctorates, while VET offers certificates to advanced diplomas, as well as vocational graduate certificates and diplomas. There is therefore a degree of equivalence between some qualifications, though sector-differentiated. The Australian Qualifications Framework (AQF), introduced in 1995 and phased in over the next five years, links these qualifications with each other (as indicated by the arrows):

... in a range of learning pathways between schools, vocational education and training providers and universities as ... learning and career ambitions require. The AQF makes a specific commitment to flexible, transparent and systematic learning pathways and to the removal of boundaries between educational sectors. It therefore encourages cross-sectoral linkage programmes ... (http://www.aqf.edu.au/learn_employ.htm).

Figure 1. **Cross-sectoral qualification links**



Source: http://www.aqf.edu.au/learn_employ.htm

In one sense the two sectors may indeed be considered parallel worlds. They both provide opportunities for tertiary education. They are different in missions, structures and funding regimes, as well as in such characteristics as number of students, age profile of students, and coverage of fields of education and equity groups (Karmel and Nguyen, 2003, p. 12). Though different, they are not distinct. Higher education has, as its primary focus, the pursuit, preservation and transmission of knowledge, while VET predominantly focuses on education and training for work. However, higher education also has a concern with employment-related learning outcomes, while VET does provide more generic skills within its vocationally oriented programmes (DEST, 2002, para 6).

The interface between these educational sectors has been expanding. This is the result of a number of factors such as the changing nature of work, need for multi-skilling and growing acknowledgement of the importance of learning throughout life. In a society committed to lifelong learning, and an economy requiring a knowledgeable, skilled, flexible and adaptable labour force, it is argued there needs to be clear and easy pathways between these sectors (DEST, 2002, Executive summary, p. 3); that people need to have choices; and that ability to move between the VET and higher education sectors (inter-sectoral movement) as well as within them (intra-sectoral movement) is essential for reasons of equity and efficiency.

Thus, while higher education and VET may be considered as parallel worlds, there is another sense in which this is an erroneous picture if the assumption is that the two never meet. Rather than parallel worlds, the more appropriate metaphor may be tectonic plates whose interactions slowly form a convergent boundary, where the plates move towards one another, and either one moves beneath the other or a collision occurs. In the case of higher education and VET in Australia, there are many examples of such movement, such as the formation of five dual-sector institutions (offering both higher education and VET); institutions from different sectors sharing the same location and facilities while remaining organisationally discrete; some programmes comprising studies offered by both sectors; and individuals simultaneously enrolling in both sectors. Even at national level, there is enshrined in policy a credential convergence, where some qualifications at the same level on the Australian Qualifications Framework can be offered by institutions in either sector (as indicated in Figure 1 in the case of diplomas and advanced diplomas).

In recent years, student movement between the sectors has increased within a framework of lifelong education. This movement involves not only students with VET studies going to higher education, but also students with higher education studies enrolling in the VET sector (Golding, 1995; Harris et al., 2005; Keating, 2006; Harris et al. 2006). The National Centre for Research in Vocational Education has highlighted the growing proportion of persons with a qualification from both sectors, particularly the increase in the proportion of VET qualified persons who also have a degree (Karmel and Nguyen, 2003, p. 11). Keating (2006, p. 68), too, has stated that one-quarter of undergraduate and one-fifth of postgraduate enrolments in 2003 were students with prior VET studies, and numerous press articles of late continue to furnish anecdotal evidence of growing student traffic between the two sectors.

What is of particular interest, and yet has little research undertaken on it, is the nature of this student movement which may shed some light on the relationship between the 'two worlds' of higher education and VET. Accordingly, this paper asks four main questions: who moves, why do they move, how do they experience moving, and what do they think of their moves?

Methodology

The study is based on both quantitative data and qualitative text obtained through different methods, and informed by an extensive literature review. First, existing national data were mined from the National Centre for Vocational Education Research and the Australian Department of Education, Science and Training as background information.

Second, a survey was undertaken of students commencing study at all eight VET institutes and the three universities in South Australia. An online questionnaire was developed, compared with others used in similar studies, independently reviewed and piloted. Questions focused on such areas as: previous studies, current studies, reasons for undertaking further study in the other sector, ease/difficulty in undertaking this study, similarities/differences in studying in the two sectors, and level of comfort in moving from one sector to the other. After obtaining permission from all institutions to access students, questionnaires were dispatched in late 2003. Due to privacy legislation, it was not possible to isolate only those eligible for inclusion – that is, experience of study in both sectors. The questionnaire therefore had to begin with a question which filtered out those who were eligible. Follow-up was undertaken, and data entered into the Statistical Package for the Social Sciences (SPSS) for analysis. Valid responses were obtained from 556 students (190 VET students with higher education achievement, 366 higher education students with VET experience). There was no way of knowing how many were in the eligible population, or where any bias may have resided.

Third, in-depth interviews were held with 49 students who had returned questionnaires in the survey and expressed willingness to be followed up. These structured interviews investigated their histories of learning transitions, which career service(s) they used and their goals for each move. The interviews were transcribed and the text entered into software for analysis.

Key differences between the higher education and VET participants are summarised in Table 1. Among the survey respondents, the higher education group contained more females, was younger and there were twice as many recent school leavers. Far fewer higher education students were fulltime employed, with twice the proportion not employed at all. Of those interviewed, the higher education group was again younger than the VET group (though evenly divided by gender).

Table 1. Key differences between the higher education and VET students

Characteristics	HE commencing students with VET experience (%)	VET commencing students with HE experience (%)
Survey respondents (N=556)	66	34
Gender: females	71	65
males	29	35
Age: under 25 years	35	21
45 years and over	9	25
Left school: in last five years	27	13
Employment: fulltime	16	55
not employed	35	18
Interviewees (N=49)	78	22
Gender: females	63	64
males	37	36
Age: under 25 years	29	36
25-29 years	34	27
30-34 years	37	36

In interpreting the findings, a limitation was the focus on one Australian state and the relatively low numbers of students, arising from difficulties encountered in undertaking the survey and in using incomplete databases, particularly on VET enrolments. A second constraint was the inadequate quality of extant national data (Ramsay et al., 1997; Teese and Polesel, 1999; Pitt, 2001; Karmel and Nguyen, 2003), in particular the absence of statistics on VET commences with 'incomplete' university studies and the inability to track individuals.

Thus, representativeness of these samples could not be ascertained. The findings from the different sources, however, were relatively consistent and served to increase confidence in the robustness of the information and reinforce the key messages.

The findings

Who moves?

From the South Australian survey, it was estimated that there are approximately two and a half times more students with higher education experience enrolling in VET than students with VET experience enrolling in higher education (Harris et al., 2005, p. 27). This is acknowledged as an estimate only (and has been questioned by Moodie, 2004). Certainly the dimensions of this phenomenon are 'complex' (Keating, 2006, p. 68), given inadequacies in extant national data and especially the large 'black hole' of VET commencers with incomplete university studies (found to be 40 % in this study) that can be gauged only from undertaking a survey such as the one on which this research is based. However, whatever the precise magnitude, the pertinent point is that it is the opposite to what is most commonly understood in public perception, and occurs despite the perceived lower status of VET qualifications and hence the tremendous pressure from parents and schools for students to go to university.

Extensive inter-sectoral (enrolments between higher education and VET) and intra-sectoral movement (enrolments within higher education or VET) was identified among the survey respondents. In the case of VET commencers, 25 % had two inter-sectoral moves, while 51 % had between three and eight inter- and intra-sectoral moves. With higher education commencers, 17 % had two or more inter-sectoral moves (including 4 % who had between three and four moves), while 49 % had between three and eight inter- and intra-sectoral moves. Thus with about half of all students experiencing between three and eight moves, these findings underscore both the significance of and complexity in movement between and within these educational sectors.

Apart from the magnitude of movement, what is also of keen interest, given sparse research in this area, is the nature of this movement: what are the characteristics of these learners? For those moving in either direction, females comprised the greater proportion. For almost all fields of education, the majority of the VET cohort was in the 30+ year age group, while the majority in the higher education

cohort was students aged less than 30 years (with 37 % under 25 years). This tends to indicate that, for some students, VET is providing an alternative route to university rather than directly from school.

There were similarities in the destinations of the cohorts moving to higher education and those moving to VET. For both groups, business-related studies and to some extent arts-related studies, were popular. Health and education were more popular destinations for those moving to higher education than for those moving to VET. For females in both VET and higher education, arts and business-related studies and education were fields that consistently attracted large proportions of enrolments, while for males, business, science and engineering studies were popular for both sectoral groups. The dominance of business-related fields as destinations for those moving in either direction supports findings cited in earlier literature (Golding, 1995; Millican, 1995; Golding et al., 1996).

The survey indicated that those students going from VET to higher education generally appeared not to have lengthy delays before movement compared with those going in the reverse direction. This is also consistent with other findings (Golding, 1995; Pitt, 2001). The data suggest that, among those with completed courses, students moving from VET to higher education tend to do this in a more planned way without a substantial time delay compared with those moving the other way.

The study's sources, therefore, reveal that the higher education to VET movement is typified by mature-aged female students in part-time study in the VET sector, where the move is often to a different field of education. In contrast, the VET to higher education movement is typified by younger female students studying full-time, where the move is frequently to the same or a similar field of education.

Why do they move?

Students' reasons for choosing to undertake further study in the other sector are summarised in Table 2. They were asked to indicate their level of agreement/disagreement on 19 given reasons using a five-point scale.

One key difference is the strength of motivations. The higher education and VET commencers responded significantly differently on 13 of the 19 reasons. On all but one of these 13 items, significantly more higher education than VET commencers agreed with these as reasons for undertaking study in the other sector. The one exception was that more VET (25 %) than higher education commencers (2 %) were studying because it was required by their employer.

Table 2. Respondents' reasons for choosing to undertake further study in the other sector

Questionnaire item <i>I enrolled in my current programme / course ...</i>	HE commencing students with VET experience (N=366) % agree	VET commencing students with HE experience (N=190) % agree	Level of significance: ** = <.01 * = <.05
• to improve my employment prospects	93.8	80.7	**
• for personal interest, development or recreation	82.9	70.1	**
• to gain or improve my practical skills	76.9	78.9	
• to get a vocationally specialised education	76.3	65.1	*
• to get a broad education	69.0	37.9	**
• to get a prestigious qualification	65.1	28.2	**
• to retrain for a different career	63.2	41.4	**
• to improve my career prospects in my current field	58.3	65.2	
• to update my previous qualification	50.5	29.6	**
• to refresh my study skills after a period out of education	30.5	32.2	
• because I was advised to by someone I respected	25.9	17.7	**
• to qualify for workforce re-entry after a period out of the workforce	24.6	17.2	
• to improve my English language skills	21.7	7.8	**
• because I could get status for my previous qualification	21.4	6.0	**
• to fulfil a requirement for another course	11.1	18.6	
• to please my family	11.1	2.7	**
• to fill time, meet people or be with friends	9.2	7.4	*
• to be eligible for financial assistance	5.4	8.3	
• because it was required by my employer	2.4	25.0	**

Note: In this table, only combined figures for 'agree' and 'strongly agree' are shown; the remaining percentages are either 'neutral', 'agree' or 'disagree'.

A second feature is the differences in the nature of motivations. One important area is related to their occupational motivations: retraining for a different career (HE 63 %; VET 41 %) and improving their employment prospects (HE 94 %; VET 81 %). While the majority of the higher education commencers were studying to retrain for a different career (63 %), the majority of the VET commencers were studying to improve their career prospects in their current field (65 %). Another area relates to perceptions of the educational experience they would be receiving: getting a 'broad education' (HE 69 %; VET 38 %), a 'prestigious qualification' (HE 65 %; VET 28 %) and an update of their previous qualification (HE 51 %; VET 30 %). These last two motivations were the major areas of disagreement between the cohorts. The higher education commencers have a wider range of motivations for undertaking study, reflected in over half of them agreeing with nine of the given reasons compared with over half of the VET commencers agreeing with only five of these reasons. Higher education commencers were seemingly more strongly motivated by educational drivers, vis-à-vis VET commencers being more strongly motivated by employment-oriented reasons.

However, what is also noteworthy is that the top three choices for both cohorts were the same. The main reason for all students was improving employment prospects, followed by personal interest, development or recreation and gaining or improving practical skills. Divergence came in the fourth choice – 'to get a vocationally specialised education' for higher education commencers, and 'to improve my career prospects in my current field' for VET commencers. There is an indication that VET commencers were not seeking to change direction so much as to get further training in an existing career area, often at the instigation of employers. In contrast, higher education commencers were clearly seeking to change direction and to get a vocationally specialised education.

Notable among the reasons is that more higher education commencers (83 %) considered they were studying for personal interest, development or recreation reasons than did VET commencers (70 %) – nevertheless, for both groups, this reason figured highly alongside their occupational motivations. The finding is consistent with those of other studies (Werner, 1998; Millican, 1995). The data clearly reinforce that students perceive their moving to another sector for further study is stimulated by a combination of occupational and personal interests.

Despite these differences, it was significant that the top 10 reasons for both sectors were the same (though with variations in ranking). Overall, this may well reflect a converging of perception in regard to what can be gained from the sectors both in terms of personal development and career outcomes.

How do they experience moving between sectors?

The research investigated issues which may have influenced the students when making their decision to take up study in the other sector. The percentages of respondents indicating difficulty on 15 given issues are presented in Table 3.

The one common area of difficulty for both cohorts was making changes in their lives so that they had enough time to study (HE 62 %, VET 53 %). There were significant differences in their responses on nine of the other areas. Two areas of significant disagreement were in difficulties with financial issues – ‘having sufficient income to study’ (HE 66 %, VET 37 %) and ‘paying the fees’ (HE 57 %, VET 30 %) – which those starting higher education found substantially more difficult than their VET counterparts.

The students found it relatively easy to obtain careers guidance to help them in their decision-making about study in the other sector, though significantly more difficult for higher education commencers. ‘Getting your employer’s support to study’ was another aspect which these students found relatively easy to handle. Employer support would be advantageous when the goal in undertaking further study is relevant to one’s current employment and the response to this issue corresponds with students’ agreement cited earlier that improving career prospects in their current field was a driving force behind their career decision to undertake further study.

VET commencers found, on average of all the factors, the moving process easier than did the higher education commencers (HE 51 %; VET 62 %). Very few VET commencers found ‘meeting the entry requirements for the course’ or ‘going through the application process’ difficult. Not surprisingly, considering the ease with which the VET students dealt with these issues, ‘having the confidence to undertake further study’ was significantly less of an issue for them than for higher education students, as were ‘getting advice from staff at the current institution’ and ‘doing something different from [their] friends’.

The data reveal a picture of a group of personally more tentative individuals commencing in the higher education sector for whom

Table 3. Respondents' views on issues influencing them when choosing to undertake further study in the other sector

Questionnaire item <i>When making your decision to undertake your current programme, how easy / difficult did you find ...</i>	HE commencing students with VET experience (N=366) % difficult	VET commencing students with HE experience (N=190) % difficult	Level of significance: ** = <.01 * = <.05
• having sufficient income to study?	65.8	36.5	**
• making changes in your life so that you had enough time to study?	61.5	52.7	
• paying HECS [Higher Education Contribution Scheme] and other fees?	56.8	30.1	**
• having the confidence to undertake further study?	33.5	10.3	**
• getting careers guidance to help you make a decision?	29.6	18.8	*
• finding an award programme/course you wanted to do close to home	28.6	34.3	
• going through the application process?	28.1	9.9	**
• getting advice from staff at the current institution	23.0	10.2	**
• getting adequate information about the employment prospects of this award programme/course?	21.7	20.0	
• getting your prior qualifications recognised?	21.3	17.9	
• getting your employer's support to study?	18.1	15.3	*
• meeting the entry requirements for the award programme/course?	16.2	2.9	**
• getting adequate information about this award programme/course?	16.2	14.4	
• doing something different to your friends?	16.2	5.4	*
• getting your family's agreement to you undertaking this award programme/course?	9.9	10.6	

Note: In this table, only combined figures for 'fairly difficult' and 'very difficult' are shown; the remaining percentages are either 'neutral', 'fairly easy' or 'very easy'.

financial issues are a major concern, with students commencing VET appearing more confident, not so challenged financially and finding it easier to deal with their transition. Movement into VET appears a smoother transition, in terms of support and process, for students with prior experience in higher education than the movement into higher education is for those with prior experience in VET.

The literature regarding transition issues focuses mainly on VET students moving into university and finding difficulties in accessing information and admission policies and in adjusting to the higher education environment. There has been little corresponding research into transition issues for university students moving into VET. This study covers a range of issues relevant to two-way student movement between the sectors and finds that, although the transition was relatively easy for many students, there was genuine difficulty in making the necessary life changes in order to study.

Students also judged how differently they found various teaching, learning and assessment aspects of their experience in their current sector compared with those in their previous sector. The striking feature in their responses is the very high proportions of students who found their transition a different experience. On 10 of 11 given aspects, between 68 % and 92 % of the higher education commencers, and between 62 % and 82 % of the VET commencers, reported that they experienced difference rather than similarity in moving between sectors. The other feature is the consistency in the figures between higher education and VET students. Not only were the various factors in a similar sequence (for example, study cost, teaching style and assessment processes are in the top four in both lists), but the proportions of students from each sector tend to be similar on each aspect. The three statistically significant exceptions were cost of studying, level of work and class size, on each of which more higher education than VET commencers claimed differences.

Thus, the evidence is that the transition from one educational sector to the other, irrespective of direction of movement, is perceived as a quite different educational experience for around three-quarters of commencing students. The data serve to signpost particular areas that are most likely to be stumbling blocks and are likely to lead to attrition if not carefully handled.

Overall, however, despite the marked sense of difference between the sectors, the students did not appear overly concerned about their transitions. Almost three-quarters in both sectors reported feeling 'fairly'

or 'very comfortable' moving from one sector to the other. It is rather in the response on discomfort that the significant difference shows: twice as many of those commencing higher education (14 %) than VET (7 %) felt uncomfortable in the transfer. This figure reinforces the earlier finding on ease of dealing with issues (in Table 3) that it is in the transition from VET to higher education that the greatest degree of discomfort occurs. This is undoubtedly a reflection of the older, more financially secure, more occupationally experienced and more confident individuals who (often some time later in a process of indirect transfer) enrol in the VET sector.

What do they think of their moves?

Students reflected on their journey of learning most often in terms of improving or expanding themselves over a series of steps taken for vocational or interest reasons. They rarely thought of their journey as linear. Indeed, it was articulated in many different travel terms as 'a zigzag', 'a curve', 'a lot of roundabouts', 'a few turns in the middle', 'forks' and 'an avenue of your life where you are learning something totally outside the normal'. Some depicted theirs as spasmodic, including 'jagged', 'erratic hops', 'messy and disjointed', 'intermittent', 'a bit of a mish-mash in the beginning', 'strange', 'very stop-start', 'an adventure', 'a learning curve', 'a hop, skip and a jump', 'quite unstructured', 'initially hit and miss', 'not smooth' and 'interesting and strange'. Others used a variety of colourful, topographical descriptors such as 'very bumpy', 'very meandering', 'very winding', 'very hilly', 'meandering and scenic', 'cobblestoned', 'challenging, stressful, fulfilling' and 'very long'. Collectively these rich descriptions illustrate a circuitous learning journey for these transitory students, giving voice to the frequency of student movement illustrated earlier.

It was clear students did not believe that the learning journey needed to be straight. One interviewee believed that it was:

'... like starting at one end and then maybe make a few turns in the middle and you don't actually have to go from one end to the other in a straight line. You can do a few different things along the way and gain experience in different areas'

Nor did they view their journey as continuous. Rather, the common image was one of fragmented or discontinuous stages, explained as 'footsteps', 'the steps you take', 'the branches' and 'the stepping stones'. Certainly for most, they believed that they had agency over their journey, as it was seen as a series of personal choices:

'I make my own pathways and my own decisions ... You find what you are good at, you stick to it, and if a fork comes up in the road, you make your decision for better or for worse'.

'... you have choices about which way you go so the learning pathway is the study options you take up and even learning in your own workplace and where you are heading – leading you to a goal – the walk of life'.

A characteristic feature of their learning, however, was that it did have direction – even though where was often not known. The direction was variously described as 'the end of your career/learning pathway', 'always going one step ahead', 'what you want to do which leads you to a final goal', 'starting off at the start and continuing on to the final product' and 'certain points on a pathway to get somewhere'. Moreover, they clearly recognised that the direction changes. One claimed that it can change 'from time to time', while another that 'it always changes' because 'the path is never straight... and has different hooks in the road'. Yet another talked about their up and down trek:

'... it's a road trip; pathway seems to be very suburban. Yes, I'm going to go for a lovely walk, isn't this pretty and aren't the trees nice. For me, it has been an up and down journey – trying to make the right decisions, and am I making the right decisions? A learning journey or trek'.

And for some of these transitory students, their views embodied a commitment to lifelong learning. It was expressed as 'learning your life', 'a continuum of learning', 'the walk of life' and 'the different avenues available to you at different stages of life... Throughout your life, you have to keep learning and throughout your career'.

The reasons for their frequent moving were varied. A common response was the lack of guidance they received, or used. One said, 'I was very naïve with a lot of stuff and didn't really get much information on where I was going' and another, 'I suppose there may have been an easier way for me to do it. When I left school, I didn't seek any career advice and at school I don't know that I got career advice either.'

Another reason was the lack of fit between the courses attempted. One acknowledged the journey as 'strange, because I have done different courses that don't really relate', while another admitted:

'I guess because my degree has nothing to do with vocational education. You get basic, broad analytical skills from the BA [Bachelor of Arts], but you don't get any practical knowledge that I had gone on to apply, so it doesn't feel like it followed on logically ...'

Inexperience was also hinted at as a reason for so many moves. Some recognised that at the beginning of their learning journey they did not know what they were doing or where they were going. One referred specifically to their young age when making early decisions about learning options:

'I guess I started at the start and took a bit of a turn and ended up on the learning pathway I wanted to take. After that initial decision, I have realised what I wanted to do. It was difficult when you first start, when you leave school and go to [VET] or uni. It was always tough at that age to know where you want to go – it takes a couple of years to decide'.

Yet another reflected on the learning that derives from sources other than formal study, claiming that 'learning ... is not just what you study for – it's where you learn from other people and experiences. I ... had no idea of what was available or what was out there or what you could choose'. For others, it was a case of not having the appropriate prerequisites, with one admitting that 'I have used three different institutions to get to where I want to be, but I don't think I could have done it any other way, due to my high school level'.

As a consequence of these multiple moves, many recognised their learning journey as circuitous. Some acknowledged that their journey could have been quicker and easier, and expressed mixed emotions about their moves. One said 'it hasn't been too good – very stop and start, and change and switch over to this path and then switch over to that path', while another confessed 'all those mistakes, and I would change that if I went back'.

Conclusions and implications

The findings reflect a diversity of learning trajectories which are not as easy, seamless and linear as policy desires (summarised earlier, and illustrated in Figure 1). They have shown that the reality of experience for a proportion of tertiary students is quite different from the rhetoric of policy. One may well ask to what extent linear or 'traditional' pathways survive? The findings here clearly support those of other research that learning careers of young people tend to be more erratic than linear and are rarely the products of rationally determined choice (Bloomer and Hodkinson, 2000; Unwin, 2003), and that their decision-making is pragmatically rational depending on opportunity and subjective perceptions (Hodkinson et al., 1996).

While not seamless, these educational transitions and pathways nevertheless appear from this research to be functional, and utilised by many people. From the experiences of these learners, it seems that the process could be enhanced by targeted, accessible and accurate information and by provision of more career advice. Notwithstanding systemic factors, however, the wherewithal of the individual is also critical as to whether these opportunities are taken up and effectively utilised.

The circuitous learning journeys taken by these students raise for administrators and policy-makers the issue of efficiency. Yet learners saw great value in whatever studies they had done, and there were few regrets about the terrain they had traversed. While there were acknowledged to be losses, such as time, money and career delay, they also were able to discern gains such as completion of qualifications, skill refreshment, acquiring information, better interpersonal skills, understanding self, growth in self-belief, and reaffirmation of what they did not want to do. Such circuitous pathways are a reflection of the rather loose fit of education with the labour market in Australia. Learning pathways have to be more individually constructed than where there might be a tighter coupling of education with the labour market (as in many European countries). The trade-off in accommodating choice and options is having to live with some inefficiencies. An understanding of these issues may assist policy-makers and institutional leaders with insights into how best to position relationships between the sectors, and to implement policies and services that help learners to navigate through education systems that are quite different in philosophy and pedagogy.

There are four main implications of this research. First, there is a need for interrogation of the meaning and consequences of the notion of 'seamlessness' in educational policy and what it implies for learners, particularly those without the personal wherewithal and resources successfully to navigate transfer between different sectors. Second, there is a need for more complete and comprehensive statistics on student pathways, especially data on the private VET sector and on learners who enter the VET sector with incomplete higher education qualifications. Third, there is a need for two-way models of student movement when examining articulation and credit transfer within a lifelong learning framework. The findings here reinforce the claim by Golding and Valence (2000) that one-way models are simplistic, illusionary and inaccurate, and are misleading, patronising and destabilising on VET from a learner perspective.

The fourth and arguably most profound implication is that greater recognition could be afforded to the different but increasingly complementary roles of higher education and VET. With evidence of the converging of both perception and practice of these sectors, and questions continuing to be raised about the senior school years and their capacity to prepare young people for the world of work, the VET sector needs to be more clearly and strongly positioned as a viable gateway to, or alternative of, the higher education sector. Moving together like tectonic plates and creating convergent boundaries, these two worlds of higher education and VET, and the relationships between them, require clarification and re-conceptualisation.

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Vocational education and training and higher education in the transition countries

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SUMMARY

This article considers the contrasting developments in the new Member States, namely the declining student participation in vocational training, and the marked increase in participation in higher education, as demonstrated by the latest Eurostat statistics. The reforms of the educational systems which are under way have led to an increase in the numbers undertaking general and higher education and to improvements in overall performances in secondary education. Nevertheless, the substantive reform of initial vocational training remains problematical, while shortages of skilled workers are being felt. However, the differentials in terms of earnings and job markets are such that they continue to encourage the rejection of vocational training and a flight to higher education. At the same time, developments in higher education primarily relate to courses of long duration and are accompanied by an increase in failure at school and graduate unemployment, while significant changes are taking place at post-secondary level calling for substantial development of short higher education courses.

In this context, the messages of the World Bank proposing that vocational training should be moved to post-secondary level, and of the European Union calling for a relaunch of vocational education primarily through a closer link with higher education seem to be contradictory. Further reflection is called for, with a greater understanding of the diversity of the situations, in the context of implementation of the Copenhagen and Bologna processes.

Keywords

Secondary vocational and technical education, post-secondary education, higher education, new Member States

Introduction

According to the Helsinki Communiqué on Enhanced European Cooperation in Vocational Education and Training ⁽¹⁾, *policies should engage all young people in vocational training and/or higher education, ensuring at the same time that they acquire skills and competences relevant to the labour market and to their future lives... VET systems should, as part of flexible educational pathways, increasingly enable progression to further education and training, especially from VET to higher education.*

For countries such as the former accession candidates in which vocational education and training were in difficulty at the time of accession in 2004 ⁽²⁾, these policy goals constitute a threefold challenge: simultaneously to pursue the implementation of effective vocational training, to promote the development of higher education, and to facilitate the passage from one to the other. In 2004, *the sharp increase in the number of students entering higher education has helped the expansion of employment in services and the rapid increase in direct foreign investment. But education and training systems have largely been reactive, and are still ill-equipped to play an active role in future changes in the economy and employment. In particular vocational education and training have remained the poor relations in the changes that have occurred* (Masson, 2004).

Consequently, it would seem to be appropriate to revisit the situation as regards the education and training systems of the 'new Member States' and in particular the developments in vocational training and higher education, together with the issue of access from the former to the latter, where the analyses undertaken in 2004 showed evidence of strong momentum and of certain negative effects on the former. The aim here is to analyse more closely the difficulties and challenges relating to the three Helsinki objectives identified above, and to seek to discern the factual realities behind the conventional wisdom.

Firstly, the considerable difficulties facing vocational training systems in the new Member States must be highlighted, the first

⁽¹⁾ Communiqué of the European Ministers of vocational education and training, the European social partners and the European Commission, convened in Helsinki on 5 December 2006 to review the priorities and strategies of the Copenhagen process.

⁽²⁾ See collectively the articles of issue 33 of the European Journal of Vocational Training. See also issue 41 of the European Journal of Vocational Training which has a number of articles devoted to the accession of Romania and Bulgaria.

indicator of which is a fall in numbers while, in parallel, the take-up of higher education places is increasing rapidly. These trends vary, however, from one country to another and a review will make it possible to categorise the various situations, the main causes of which seem to be differing economic strategies. In these circumstances, the European institutions and the World Bank offer different assessments and we shall seek to demonstrate their relevance both in terms of an understanding of the real problems and of the solutions proposed. Lastly, it will be suggested that significant changes are having an effect on the relationship between vocational training and higher education and that this area merits further attention in the context of the implementation of the Copenhagen and Bologna processes.

As regards vocational training, the analysis mainly focuses on its secondary level, in accordance with traditional views and practices and with the existing data. The validity of these boundaries will however be scrutinised and a broader approach advocated. Conversely, we shall not deal with continuing vocational training, which is based on other principles and would necessitate different research. We include the candidate countries Turkey and Croatia, to the extent that information is available.

Contrasting trends in the numbers of students in vocational secondary education and higher education

This analysis is based on the data produced by the European Commission in 2006, supported by figures from Eurostat. The most recent information dates from 2003, meaning that it relates to periods preceding the accession of the new Member States. It is nevertheless very interesting from the point of view of the dynamics observed.

A look at the variations between 2000 and 2003 demonstrates in many cases an often appreciable decline in participation in initial vocational education in the majority of the new Member States, reaching 34 % in Lithuania, whereas it was stable or even increasing slightly on average in the 25 countries of the Union. Only Romania saw limited growth. It might appear that this decline was sharper where the starting point was higher. This is not the case, however, as the decline was limited in the countries having the greatest contribution to VE: the Czech Republic, Slovakia and Slovenia. Conversely, there was a rapid decline in the countries where its level

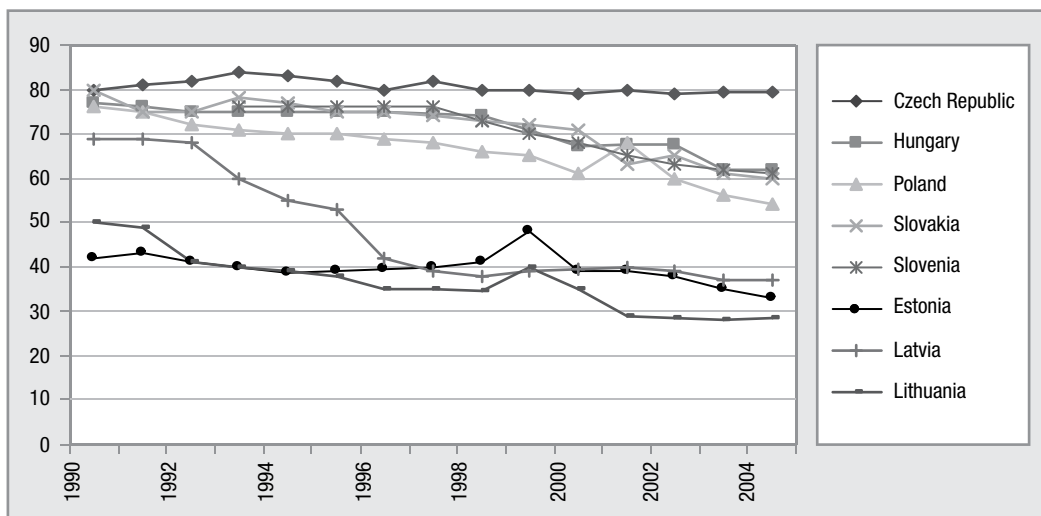
Table 1. Participation in secondary vocational education (VE) and in higher education (HE)

Contribution of vocational education (VE) to higher secondary education (percentage of students in higher secondary education taking vocational courses) in 2000 and 2003 and variation between 2000 and 2003 in percentage terms. Participation of 20-24 year-olds in higher education (HE) as a percentage, in 1998, 2000 and 2003 and variation between 2000 and 2003 in percentage terms.

	EU 25	CZ	EE	CY	LV	LT	HU	MT	PL	SI	SK	BG	RO	TR	HR
VE 2000	55.2	80.2	32.5	14.2	38.6	39.6		24.8	64.3	72.3	78.6	55.7	62.5	49.0	
VE 2003	55.6	79.3	29.3	13.7	37.8	26.1	23.7	24.0	54.3	69.4	75.4	55.0	64.4	38.0	74.2
VE Variation 2003/2000	+0.7	-1.1	-9.8	-3.5	-2.0	-34		-3.2	-16	-4.0	-4.0	-1.3	+1.0	-22	
HE 1998	47.1	23.6	45.5		43.1	39.3	29.9		39.1	45.9	24.2	41.2	18.5		
HE 2000	50.7	28.5	56.7	20.8	56.5	51.5	36.4	21.7	49.9	55.4	28.6	41.6	23.1		
HE 2003	56.4	37.1	64.8	32.9	72.2	69.2	52.2	29.8	62.0	68.0	34.0	41.2	37.3	28.2	39.2
HE Variation 2003/2000	+11	+30	+14	+58	+28	+34	+43	+37	+24	+23	+19	0	+61		

Source: Eurostat, UOE data collection, and OECD for VE 2003 in Hungary.

Figure 1. Contribution of VE to higher secondary education

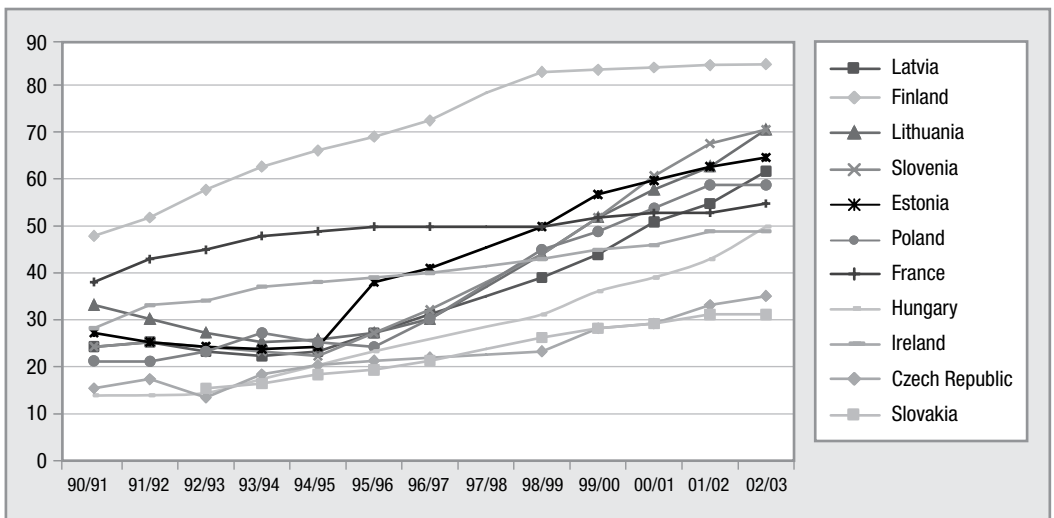


Source: Eurostat

was already far below the European average (Estonia, Lithuania) or where its level was average (Turkey, Poland). These data show a clear polarisation between, on one hand, the Czech Republic, Slovakia and Slovenia in which, along with Austria, the Netherlands, Belgium and Croatia, participation in vocational education exceeded two-thirds of the numbers in higher secondary education and, on the other hand, Estonia, Lithuania, Malta and Cyprus which, with Italy and Portugal, were amongst the countries in which participation in vocational education was below one-third.

Conversely, the increase in participation in higher education was very marked, clearly in excess of that seen on average across the EU, even in countries which had already attained the highest levels. Already significant between 1998 and 2000 and even before that (ETF, 2003) notably in Estonia, Latvia, Lithuania and in Poland, the increase continued and in some cases intensified between 2000 and 2003, reaching 61 % in Romania. Only Bulgaria marked time, principally due to a considerable outflow of students over this period. Nevertheless, the phenomena do not reflect any convergence of the countries' profiles, and participation in higher education continued to increase more quickly than the European average in the countries where it was already strongest.

Figure 2. **Growth of the numbers in higher education in the new European States and in some other countries**



Source: Eurostat

The diagram below demonstrates how the increase in participation in higher education accelerated in some of the former accession candidates in the mid-1990s to exceed the already notable rate observed at the same time in countries such as France or Ireland.

As can be seen, another polarisation exists between countries with more than two-thirds of young people aged between 20 and 24 in higher education, including Lithuania, Slovenia and Latvia together with Greece, Sweden and Finland, and countries where the figure was less than half, including the Czech Republic, Cyprus, Malta, Slovakia, Bulgaria, Romania, Croatia and Turkey, which share this score with Germany, Austria and Luxembourg.

It is interesting to note that these two polarisations are not exactly symmetrical, since Slovenia has high levels of participation in both VE and higher education, while Malta and Cyprus present the opposing scenario of lower participation in both. Further, it is significant to find eight of the new Member States in the extreme cases shown in the table below, thus showing their considerable differences as compared to the averages observed for the European Union.

Table 2. Participation in VE and HE in 2003

Situation in 2003 ⁽³⁾ Old Member State New Member State	Participation in VE exceeding two-thirds of the numbers in higher secondary education	Participation in VE between one-third and two-thirds of the numbers in higher secondary education	Participation in VE below one-third of the numbers in higher secondary education
Participation in HE exceeding two-thirds of 20-24 year-olds	<i>Slovenia</i>	Greece, <i>Latvia</i> , Finland, Sweden	Estonia, <i>Lithuania</i>
Participation in HE between half and two-thirds of 20-24 year-olds	Belgium, the Netherlands	Denmark, France, Poland	Italy, Portugal
Participation in HE below half of 20-24 year-olds	<i>Czech Republic</i> , Slovakia, Croatia, Austria	Germany, Luxembourg, <i>Bulgaria, Romania</i> , <i>Turkey</i>	<i>Malta</i> , Cyprus

⁽³⁾ Countries for which the data for both sectors was not available are not included in this table, namely Ireland, Hungary and the United Kingdom.

Lastly, a third polarisation can be seen amongst the new Member States between on the one hand the Czech Republic, Slovakia and Croatia, which retain very advanced vocational training at secondary level while participation in higher education remains limited, and on the other hand Estonia, Lithuania and Latvia where entry to higher education significantly exceeds the European average and which continue to become closer to the Finnish 'model', but where vocational training is losing an increasing number of students.

A clear contrast is emerging between the Baltic model and the Central European model, a consequence of their respective socio-cultural heritage, but also of differing economic choices. In 2003, Romania and Bulgaria were closer to the Central Europe configuration, although Romania saw very strong growth in higher education. Starting from differing situations, Turkey, Cyprus and Malta showed dynamics which tended to align them rapidly with the Baltic model. Slovenia was in some respects a counter-example, seeing high levels of participation in both vocational training and higher education.

In addition to the highly rapid and unstable nature of the developments under way in the new Member States, and in contrast with the much slower changes in the old ones, there is evidence of difficulty being experienced by the new States in maintaining substantial vocational training at secondary level while expanding higher education. These trends are not new. They are a continuation of changes observed since the beginnings of the 'transition', reflected in a decline in numbers pursuing technical and vocational courses in favour of general courses, and a general increase in education at secondary level and in access to higher education.

The emphasis placed on general training, notably when it is supported by substantial public financing as in the Baltic countries, in Slovenia and Poland, translates into improved performances in international surveys: the PISA surveys (OECD, 2005) show clear progress between 2000 and 2003 in Poland and Latvia, while TIMSS ⁽⁴⁾ 2003 (Mullis et al. 2005)

(4) See Gonzales, Patrick et al., 2005 *'The 2003 Trends in International Mathematics and Science Study (TIMSS) is the third comparison of mathematics and science achievement carried out since 1995 by the International Association for the Evaluation of Educational Achievement (IEA), an international organization of national research institutions and governmental research agencies. TIMSS can be used to track changes in achievement over time. Moreover, TIMSS is closely linked to the curricula of the participating countries, providing an indication of the degree to which students have learned concepts in mathematics and science they have encountered in school. In 2003, some 46 countries participated in TIMSS, at either the fourth- or eighth-grade level, or both.'* Introduction available from Internet: http://nces.ed.gov/programs/quarterly/vol_6/6_4/2_1.asp#2 [cited 12/12/2006].

reveals improvements in performances in mathematics and science in Lithuania and Latvia, at the same time as a decline in Bulgaria and Slovakia. Conversely, progress is limited in higher education in terms of degrees in mathematics, science and technology (MST, European Commission, 2006), in which only Lithuania surpasses the European average. It can be seen therefore that the extraordinary growth in numbers in higher education has as yet only been reflected to a limited extent in the MST courses which the European Union has held to be one of the major priorities of the Lisbon agenda.

The difficulties in vocational and technical secondary education

Firstly, it should be noted that what is referred to here as vocational training covers a wide variety of different courses. It includes both technical training courses with a twofold vocation (the pursuit of higher education studies and access to the job market) and of 'purely' vocational courses (in which apprenticeships play a small part) providing access to a qualification and sometimes also to higher education, but in conditions which are clearly more problematical. These courses also have the common feature of being run, in most cases, in educational establishments. A large-scale migration has taken place from the second type towards the first, and even in countries where the combined numbers in both types of courses have changed only slightly, the division of students between the two types has profoundly changed to the extent that 'vocational' courses today only represent between 10 % and 40 % of the numbers at secondary level, depending on the country (ETF, 2005). This finding is of fundamental importance in view of the fact that technical courses are by their nature more likely to lead to the pursuit of higher education studies than vocational ones.

At the same time, technical and vocational courses have crossed the borders of secondary education and have begun to have a place in post-secondary education and higher education, in keeping with long-established trends in a number of the 'old' European countries. Unfortunately, there is a shortage of data in this area and the analysis undertaken to date concentrates on secondary education.

Therefore, in the context of the educational reforms undertaken in the mid-1990s relating notably to the improvement and extension of basic training, the modernisation of curricula and teacher training,

the changes made to vocational training have not met with the anticipated success (ETF, 2003). There were difficulties with broadly disseminating the results of pilot operations, inadequate finance from both the State and businesses, the absence of political continuity in the conduct of the reforms, and inadequate cooperation between the various stakeholders, and notably between the competent ministries and the social partners. Difficulties occurred, above all, as a result of the complexity of the task of constructing training courses and programmes tailored to the job market in the context of preparation for enlargement, of globalisation and of the economic dilemma as to whether to redevelop industries using low-cost labour, or to promote activities requiring a highly-qualified workforce. Today, the qualifications obtained remain poorly suited to the needs of the job market, the 'technical' courses have broadly become de-professionalised and the 'vocational' courses are inadequately vocational.

Even in countries in which the reform of vocational education has been undertaken with more continuity and consistency, such as Romania, a recent article refers to complaints from employers that *'students are not well prepared for the realities of working life and that the standards to which the schools train do not reflect the demands of the workplace'* (West and Şerban, 2007). The authors are right to point out that dissatisfaction of this sort is shared by numerous countries, but they omit to mention the inadequacy of the budgets allocated to education generally and to vocational training in particular, which have severely affected the quality of the equipment required for practical training in workshops, the updating of infrastructure and teacher training ⁽⁵⁾.

Certain initiatives, while strongly advocated by the political authorities, have met with mixed success. This is the case with the development of apprenticeships in Slovenia, based on the German model, where the failure – reflected by the fact that only 3 % of secondary pupils were in the 'dual' system in 2006 ⁽⁶⁾ – was due both to the lack of support from companies unwilling to contribute financially to training and to resistance on the part of pupils and families for whom

⁽⁵⁾ These shortcomings even led to the much-publicised resignation in 2005 of the Minister for Education on the basis of an inadequate budget.

⁽⁶⁾ Slava Pevec, presentation at an ETF conference in December 2006. In addition to considerations on the failure of the introduction of the dual system, the speaker criticised vocational courses for the low number of new standards appropriate to the requirements, the still very traditional approach in terms of curricula, juxtaposing three distinct but poorly coordinated pillars (general, theoretical and practical), the limitations of the social partnership and an over-centralised educational system.

entering apprenticeship meant becoming even further removed from the much-preferred path to higher education (Svetlik, 2004). More generally, considering the problems in developing apprenticeships in the new Member States, Nilsson (2007) emphasises their association with a low rate of academic success and with difficulties in recruiting students, depending on the country. Conversely, the relaunch of apprenticeships in Croatia in 2003 with marked support from the Chamber of Trades seems to have been more successful.

There was limited success also in the case of the 'profiled secondary schools' set up in Poland at the start of the current decade based on the Swedish model to encourage improved integration between general education and vocational education through the establishment of a hybrid model, with a strong technology bias but without a precise vocational foundation, swiftly marginalised by students because they were neither sufficiently general to aid access to university, nor sufficiently vocational to constitute preparation for working life (ECOTEC, 2007).

These two examples demonstrate the extent to which the dynamics of the pursuit of university studies have affected and continue to affect the success of the reforms undertaken in vocational training, and notably have deterred students who would previously have embarked on such training. *'In many countries the advent of a mass university system has put pressure on vocational pathways, which need to deliver access to higher education if they are to compete with general education in the eyes of parents and students'* (West and Şerban, 2007). Consequently, most of these countries are now faced with increasing shortages of qualified workers, aggravated by the substantial movement of qualified workers from East to West since the enlargements of 2004 and 2007. It is for this reason that, far from expressing satisfaction with the growth in higher education, many leaders are deploring and seeking to curb the decline in numbers undertaking vocational training.

This realisation was particularly noticeable in the early 2000s in Estonia and Latvia, but also in Cyprus which set the objective of raising the rate of participation in vocational training from 12 to 20 % of the numbers in higher secondary education, and in Turkey which aimed for an increase from 35 to 65 %. Nevertheless, the 2003 figures did not indicate a reversal of the trend at that stage. In Romania, which was more determined and organised, it was estimated (West and Şerban, 2007) that the education system was still producing young people who were overqualified for the jobs currently available, although this could change if the demand for highly qualified workers were

to increase. Thus, Romania saw an increase compared to 2000, as a result of the administrative decision, taken in 1999-2000, to control student intake by limiting access to high schools according to pupils' performance in national tests (Birzea et al., 2000, cited by West and Şerban, 2007). The Czech Republic adopted a similar approach, maintaining very high numbers in vocational courses, but spending substantial public resources on this, to the detriment of the development of higher education.

More generally, these attitudes are justified by the fact that the influence of traditional industry in the job market is still very strong, much more so than in the rest of Europe. In Slovakia, where automobile construction has seen huge foreign investment in recent years, the demand for qualified workers is very high and justifies training initiatives, which the State is struggling to provide. Slovenia has the problem that pupils are turning away from vocational training while industry still constitutes 80 % of exports.

This realisation has also translated into the accepted need to reform and improve the advice, information and careers guidance systems, or to increase public funding for vocational training (ETF, 2005), and lastly to make a genuine effort to implement the policies and tools advocated in the context of the Copenhagen process launched in 2002 (Masson, 2007).

Developments in post-secondary and higher education

Nevertheless, people are entering the job market later and later, and at the same time the levels of qualification required in certain industries and services are becoming higher. In these fields, the trend is to delay initial vocational training until after secondary education, either to reinforce the skills acquired, or to base the acquisition of qualifications on a more solid foundation of general education, corresponding to the end of secondary studies. Consequently OECD statistics (2006) show considerable developments in 'post-secondary' courses (ISCED level 4 (7)) most often at vocational high schools

(7) ISCED: International Standard Classification of Education drawn up in 1997; while ISCED 3 corresponds to upper secondary education, ISCED 4 corresponds to post-secondary non-tertiary education, ISCED 5 is the first stage of tertiary education with the distinction between ISCED 5 A which corresponds to the first stage of long-duration tertiary education, while ISCED 5 B corresponds to short-duration tertiary education (in France, BTS and DUT are classed as ISCED 5 B).

in Poland, Hungary and in the Czech Republic, far exceeding the OECD average of 8 % in 2004, while other observations ⁽⁸⁾ confirm this trend in the Baltic countries, Slovenia and Poland, as well as in Bulgaria, Romania and Turkey.

On the other hand, the developments in higher education relate primarily to long courses (ISCED 5A) to the detriment of short ones (ISCED 5B). Thus, during 2000 the OECD observed limited access to the latter, clearly below the average of the 19 European OECD countries, in the Czech Republic, Hungary, Poland, Slovakia and Turkey. It was however expanding in Hungary and Turkey where it has since exceeded the OECD average in 2004. On the contrary, access to long courses had already overtaken the OECD average in 2000 in Poland where it continued to develop in 2004, and in Hungary where the growth was primarily due to short higher education courses, while progress clearly above average in the Czech Republic, Slovakia and Turkey.

Table 3. Students' access to post-secondary, short higher- and long higher-education courses in 2000 and 2004 ⁽⁹⁾

%	OECD /EU19 average	Czech Republic	Hungary	Poland	Slovakia	Turkey
Post-secondary entry	9.0	30.4	20.0	13.1	2.8	
Entry to short courses 2000	12.0	9.0	2.0	1.0	3.0	9.0
Entry to short courses 2004	13.0	10.0	9.0	1.0	2.0	16.0
Entry to long courses 2000	45.0	25.0	65.0	62.0	37.0	21.0
Entry to long courses 2004	52.0	38.0	68.0	71.0	47.0	26.0

Source: OECD.

⁽⁸⁾ ETF, Conference on post-secondary education arranged in Skopje in December 2005.

⁽⁹⁾ Note that the data below differ slightly from those of Eurostat presented and analysed at the start of the article. However, they cover a longer period, from 2000 to 2004 for the OECD as opposed to 2000 to 2003 for Eurostat. Both, however, reflect the same trends, except perhaps as regards Hungary, for which the OECD data show strong growth but at a lower level than that indicated by Eurostat, at the same time as a broadly higher level being achieved.

This paradoxical situation in which considerable progress is seen in post-secondary education in the Czech Republic, Hungary and Poland, while higher education of short duration remains limited may be explained by the legacy of elitist notions prevailing in the former socialist countries and the reluctance of their universities to deal seriously with vocational education (ETF, 2003; and Cedefop Info, 2007 on the Czech Republic). Nevertheless, this dichotomy is likely to be challenged by the implementation of the Bologna process and the introduction of a 'vocational Bachelors' programme as certain countries have started to offer within the European Union. Already, Latvia has demonstrated the transformation of post-secondary education into higher vocational education of short duration.

Further, in spite of significant developments in Estonia, Poland, Slovakia and Romania, the proportion of graduates taking courses in mathematics, science and technology in 2005 remained well below the European average, except in Lithuania, linked to low levels of public spending on scientific research, with the exception of the Czech Republic and Slovenia (Masson, 2004). Despite the priority given to higher education, public funding remains inadequate and the introduction of tuition fees (sometimes high) is becoming increasingly common (Vogel and Ulmanu, 2006).

Students are therefore predominantly taking long university courses and only a limited number are studying mathematics, science and technology, although 2003 data indicate positive trends in a number of countries. Turkey and Lithuania are exceptions, the first due to sustained growth in short courses and the latter because access to mathematics, science and technology courses is above the European average. Overall, the limited progress of short courses and the continuing predominant orientation towards long academic courses do not as yet constitute a favourable backdrop for a large-scale demand for, and success of, secondary VET graduates.

The causes of the instability

It is important to analyse the reasons for these underlying movements specific to the new Member States which are proving detrimental to vocational education and are contributing to the rapid and often uncontrolled expansion of higher education. These turbulent movements result from a substantial differential – far greater than that in the 'old' Member States – between the unemployment prospects

of trainees leaving courses depending on their level of qualification, in favour of higher education.

As shown by the table below, the higher/secondary differential actually widened in the Czech Republic between 2000 and 2004 while it decreased in Hungary and in Poland. This phenomenon is interesting as it shows a rapid increase in unemployment among the most highly qualified people since 2000 in Hungary and in Poland, clearly exceeding that observed in the OECD countries of the European Union, and it must be viewed in relation to the rapid progress in the uptake of higher education in those countries, contrary to the more cautious (or less ambitious) approach in the Czech Republic.

Table 4. Unemployment rates by level of study

(prior to the end of secondary education/end of secondary education/higher education) and differential between unemployment rates for secondary education/higher education, in 2000 and in 2004

Unemployment rate	Lower secondary ISCED1/2 2000	Lower secondary ISCED1/2 2004	Secondary studies ISCED3/4 2000	Secondary studies ISCED3/4 2004	Higher education ISCED5/6 2000	Higher education ISCED5/6 2004	Differential secondary/higher 2000	Differential secondary/higher 2004
OECD/EU-19	11.3	12.9	6.9	7.2	3.8	4.2	1.8	1.7
Czech Republic	19.3	23.0	6.7	6.4	2.5	2.0	2.7	3.2
Hungary	9.9	10.8	5.3	5.0	1.3	1.9	4.1	2.6
Poland	20.6	27.8	13.9	17.4	4.3	6.2	3.2	2.8
Slovakia	36.3	47.7	14.3	14.6	4.6	4.8	3.1	3.0
Turkey	4.6	8.1	5.5	10.1	3.9	8.2	1.4	1.2

Source: OECD.

The differential is also very high in terms of salary, regardless of the duration of studies. Amongst all of the 22 countries involved in the analysis, including 15 European Union countries (OECD, 2006), Hungary ranked in first place for men holding qualifications resulting from long training courses at higher-education level, ahead of the Czech Republic, Poland being in fourth position. The situation was slightly less favourable for women (Hungary in third place, Czech Republic in ninth place and Poland fourteenth). The differential was also very marked amongst those holding short higher education qualifications, Poland being in first place, the Czech Republic second and Hungary in third place for men.

Table 5. Wage earnings of the population aged 30-44 years by level of education,
 as a percentage of the level obtained, with education to the end of secondary studies being used as a benchmark

Relative salaries in 2004	Lower secondary ISCED1/2	Secondary studies ISCED3/4	Post-secondary studies	Short higher education courses	Long higher education courses
Czech Republic/ M	81	100		167	203
Czech Republic/ F	73	100		131	168
Czech Republic / M+F	75	100		145	193
Hungary / M	77	100	128	154	263
Hungary / F	74	100	114	144	195
Hungary / M+F	75	100	119	144	222
Poland / M	76	100	110	175	186
Poland / F	71	100	103	150	164
Poland / M+F	80	100	100	166	170

Source: OECD.

On the basis of other sources, as regards the higher-education level in general as compared to the end of secondary education, the World Bank (2006) placed Hungary in first place followed by the Czech Republic, Slovenia, Poland and Lithuania. Therefore, in the transition economies of the new Member States, although the risks of unemployment are increasing, the very positive differential in terms of access to employment and the expectations of higher earnings are such as to clearly explain the popularity of higher education and the lack of interest in vocational training.

Further, as indicated by the studies and by evidence collected at numerous conferences, employers repeatedly express the need for employees with key skills that are more easily acquired through higher education, and show little interest in supporting secondary vocational education. If we also consider governmental priorities and the phenomena of emigration of qualified workers, which restrain government willingness to invest in vocational training, it is clear why the Eurobarometer (Cedefop, 2007) recorded a significant lack of interest on the part of individuals and families in vocational training in 2004 in all the new Member States with the exception of Hungary and Estonia, in stark contrast to the old ones. It can be seen therefore that unlike the citizens in the EU-15, the citizens of the new Member States

advocate general studies rather than VET, particularly in Slovenia (53 %/11 %), Slovakia (60 %/13 %), Latvia (56 %/15 %), Czech Republic (42 %/16 %), Lithuania (73 %/18 %), Cyprus (53 %/20 %), and Poland (62 %/27 %), the exceptions being Hungary (21 %/37 %) and Estonia (34 %/38 %) as against 32 %/39 % in the EU-25.

The vicious circle of secondary vocational education and the messages of the World Bank

Consequently, secondary vocational education is faced with a vicious circle. In view of the continuing difficulties it is encountering, there must be huge investment to update it, not only in terms of improving the quality of structure, content and methods, but also in terms of seeking improved efficiency and new resources, whether from the State or from private funds. Further, the costs of courses in this field are higher than those of general courses. The OECD points out that the additional expenditure per student on vocational courses compared to general courses is 15 % in the Czech Republic, 53 % in Hungary, 62 % in Slovakia, and 55 % in Turkey, in the last three cases far exceeding the OECD average of 17 %. But if student uptake is poor, investors have no incentive to invest⁽¹⁰⁾ and vocational courses become less attractive, which again discourages young people and families from taking them. In this situation, two attitudes can be identified.

Given these circumstances, the World Bank (2006) is inclined to accelerate the trend. On the basis of an analysis of the situation in eight of the new Member States (Czech Republic, Slovakia, Slovenia, Hungary, Poland and the three Baltic countries), the World Bank experts are of the view that *(i) it would not be possible or advisable to fund adequately a traditional VE system which would provide ready-to-work recruits with narrowly specialized skills, (ii) one way to reduce costs would be to locate practical training entirely in-plant but this is increasingly difficult, (iii) EU8 employers' traditional expectations of VE are unreasonable, (iv) traditional VE was the traditional answer to the question, 'What to do with those who have performed less well in basic education', but this answer no longer*

⁽¹⁰⁾ Particularly since the cost in terms of public spending per student is markedly higher in VE as compared to general education, but markedly lower than the cost per student in higher education (OECD, 2006).

convinces, (v) parents and students are showing an increasing preference for general education over VE.

In these circumstances, their recommendations are (i) do not try to re-create the old model, (ii) close or merge non-viable schools, (iii) scholarships or stipends should be awarded on the criterion of need rather than the type of school attended, (iv) make all practical training in-plant, (v) explore alternative sources of funding, (vi) encourage the growth of private training institutions, (vii) reform higher education financing by a combination of tuition fees, loans and need-based grants which would reduce both the private rate of return on higher education [as compared with other levels of education] and the attractions of tracks that lead to it, (viii) move increasingly towards post-secondary VET, (ix) deal with those who have performed less well in basic education by using imaginative methods within basic education, rather than consigning them to a separate route, and (x) transfer more of the cost of post-secondary training to beneficiaries.

The World Bank's starting point is close to that set out earlier in this article. It overlooks, however, the importance of the changes that have already taken place notably in the definition of programmes with the introduction of a skills-based approach or of key skills in curricula. It underestimates the dynamics of student intakes and particularly the fall in numbers in VE, notably in purely vocational courses, as well as the rapid rise in numbers in post-secondary vocational education. It is right to call into question the conduct of employers but fails to mention the frequently unenthusiastic attitude of governments to social partnership and new forms of governance. In fact, the search for solutions requires the implementation of new methods of regulating VE between the State, the regions, businesses and social partners, at national, regional, local and sectoral level. It is regrettable that the World Bank is silent on this subject.

As regards the solutions proposed, it seems reasonable to focus on the mechanisms of financing higher education. The concept of promoting increased equity and efficiency in the development of education systems, notably by encouraging the beneficiaries of higher education to contribute to its financing, is in line with thinking within the European Union (European Commission and Council, 2006) and could reduce the differentials examined above. The concept more generally of reassessing the mechanisms for financing VE in the light of an approach based on needs or even performance

rather than on structures is relevant, but a review of the initiatives already undertaken to this end would have been useful.

On the other hand, the suggestion that in-company practical training should be arranged would seem to be wishful thinking in view of the current state of company schemes and the resources available to them. Furthermore, it is founded on a misapprehension about what forms the basis for quality vocational education. Instead of alternating theory (at school) and practice (in a company), true vocational education is based on three pillars: theoretical teaching which is clearly a matter for schools; technical training, which implies working with appropriate equipment and software, but not in a vocational situation, and which must therefore be provided at school, or in a company if it has suitable training rooms; and lastly vocational training which involves working in conditions which are as close as possible to actual production conditions, namely in the company. To assume that the last two pillars are to be dealt with by companies presupposes that they have made the necessary efforts in terms of finance and organisation, which is certainly not the case at present.

The concept that VE could be dissociated from the role it plays in rehabilitating students with academic difficulties in general education is another ambitious objective fuelling debate in a number of countries across the world. The positive results obtained by Poland in the PISA surveys are starting to be viewed as a positive effect of the one-year postponement of specialisation in VE courses. Other countries might draw inspiration from these results. But to believe that VE could be entirely dissociated from any social mission still seems to be largely utopian. The experience of the VE schools in Russia is worth pondering: after having 'survived' for many years without any State funding, and having continued to provide mass education for those students who did not dare to enter general courses or who had been excluded from them, these schools have again found the means to invest and to operate and contribute to local and regional development in close keeping with the needs of companies.

The relationship of VE with the social inclusion objectives remains of crucial importance. The OECD (2007) put this subject on the agenda as one of the priorities set for work on VE commenced in 2007: while respecting the diversity of solutions in place in each country, the OECD emphasises the risk in turning too rapidly towards vocational education but draws attention to the advantage

of these courses in combating social exclusion. In any event, the messages of the OECD and, above all, of the World Bank clearly underline the difficulties that VE is currently facing and the need to find solutions.

The messages of the European Union

The European messages are more complex. They focus on parallelism and the value of vocational training and higher education, and extol the success of vocational training courses in terms of access to employment in many countries. Nevertheless, they ask the courses to go further than this and to provide the option of progressing to more advanced training and education, notably by transferring to higher education. They internalise the difficulties encountered in terms of infrastructure, technical equipment and teacher training, and notably the budgetary difficulties of some countries, and aim to combat the unattractiveness of vocational courses essentially through their opening onto higher education.

In fact, they repeatedly emphasise Europe's deficits in terms of higher education compared with its competitors. Conversely, they do not seem to consider the consequences of the experts' forecasts (Cedefop, 2004) of the level of new jobs by 2010 (almost half at higher level but also almost 40 % at medium levels of qualification), whereas this indication should lead to a consideration of the actual significance of this message, the access courses and means of improving the situation. Similarly they still pay only limited attention to the growing unemployment of higher education graduates and to the resulting wastage.

It is interesting to note that the five benchmarks identified in 2003 for monitoring the progress of education and training systems relate to global performances which are intrinsic to the system. None of them really concern vocational education and therefore do not reflect the changes or indeed the crises which it is undergoing, or the fact that no account is being taken of the suitability of the training for the needs of the labour market.

Further, the European messages are global. They persist in considering VE globally, failing to distinguish technical courses from vocational courses, the aims and nature of which are fundamentally different, the former often having profiles which are closer to general courses than vocational ones. They do not question the validity of

the 'dual mission' which its limitations. They do not include VE at post-secondary or short higher-education level in their analyses, without seeing the strong links created on both sides from the end of secondary education.

Lastly, they fail to note the difference between business sectors, whereas the industry and service professions show considerable real differences in terms of levels and types of training/qualification. Furthermore, they clearly fail to emphasise the differences between countries according to the level of economic development and their performances in relation to the European benchmarks. The diversity of the Member States following the last two enlargements in 2004 and 2007 is effectively much greater than previously. It may justify more nuanced messages. More generally, they tend to give the impression that all the priorities can be maintained at once in a harmonious model, and never suggest that contradictions may arise between those priorities.

On the other hand, the implementation of the principles, references and tools developed in the context of the Copenhagen process is worthwhile. The setting-up of national certification frameworks based on qualifications constructed on the basis of experience from apprenticeships and with reference to the European certification framework will enable vocational education to be redefined in accordance with job market forecasts and requirements, to shift from a rationale of supply to one of demand in redefining its points of reference and to establish a bridge with continuing vocational training.

The establishment of an active quality assurance policy based on the common European framework and on a series of relevant indicators demonstrating in particular the performance of VET in the jobs market and on self-assessment tools should also facilitate analysis of the performances of the different structures and promote both efficiency and fairness. The implementation of frameworks and procedures suited to the recognition and validation of skills and the reform of information and careers guidance systems will also facilitate the integration of VET into national education and lifelong learning strategies in which it will become possible to identify the priorities and actions to be undertaken. Nevertheless, this application of the Copenhagen *acquis* must avoid the pitfalls of rhetoric into which it has often fallen in the past (Masson, 2007) and be based as far as possible on partnership between all the stakeholders concerned and on a policy based on evidence founded on the production, dissemination and application of evidence.

Conclusion

Returning to the threefold challenge faced by the vocational education and training systems of the new Member States, the following points may be made:

- The reforms of vocational training undertaken towards the end of the 1990s as part of a more general reform of education systems have not met with the expected success with regard to vocational training, but all countries are now involved in the re-examination and relaunch of the reforms in light of the developments of the Copenhagen process. In this context, the contribution of secondary vocational education has sometimes declined dramatically giving rise to significant shortages of medium-level qualifications. At the same time (on the other hand?) performances in general education have improved.
- As a result of the reforms, but above all of a social dynamic fuelled by very significant differentials in terms of the earnings and job prospects, the growth of higher education has been and continues to be impressive. Nevertheless this primarily concerns long courses, and the creation of short vocational courses in higher education continues to be neglected. Furthermore, this growth has so far failed to materialise in scientific and technical courses. It has also revealed significant graduate unemployment in the countries where it was strongest.
- In other words, the shift from vocational education to higher education has seen huge progress, above all due to technical courses which have assumed growing importance alongside purely vocational courses in secondary education. However, this shift has not developed in a controlled fashion. The increase in graduate unemployment and in students leaving school with a qualification suggests that the content of technical courses remains poorly suited to the requirements of higher education, and that the universities have not yet understood the importance of taking an interest in these new students and therefore in developing short vocational courses, in close coordination with vocational and technical secondary schools.

It should also be understood that these developments are taking place in very varied national contexts, reflecting specific legacies and differing economic choices. In particular, the new Member States remain very different from the old ones, and the forces driving them, at the interface between vocational and higher education, are much stronger, indeed unstable.

From a methodological viewpoint, the analysis of vocational training should be refined and specific account taken of its two branches, vocational and technical training, which have fundamentally distinct characteristics and contrasting quantitative developments. Additionally, secondary vocational education should no longer be considered without a simultaneous analysis of the post-secondary and higher branches by means of it is further extended. Lastly, the measures applicable to the countries in which vocational education still represents over 70 % of the numbers in secondary education and in which industry remains predominant will not be the same as those which need to be taken in countries where vocational education makes up less than 30 % of secondary education and in which efforts are focused on advanced technology. Consequently, it is difficult to apply the same reasoning and recommendations to all countries.

In view of the dynamics created in the last few years through the open method of coordination in the fields of education and employment, it is perhaps the case that the joint implementation of the processes of Copenhagen and Bologna is creating appropriate conditions for a more structured review and for conducting the necessary reforms in a coordinated and more controlled manner. However, this remains conditional on the pitfalls of rhetoric being avoided and on giving proper thought to the coordination of the two processes.

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Accreditation of prior experiential learning and the development of higher education

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SUMMARY

Keywords

Qualifications,
lifelong learning,
vocationalisation,
certification,
experiential
knowledge

This article analyses the specificity of the French accreditation system in higher education as regards lifelong learning. The changes in higher education may thus take on a new significance. The article describes the changes that could come from wider deployment of the system in higher education.

The accreditation system introduced in France in 2002 has practically no equivalent in Europe or the world (1). Many accreditation systems outside France grant conditional access to courses leading to a qualification, especially for graduate training, but only the French system offers the possibility of acquiring a qualification, full or partial, without prior instruction. Against the background of the changes in higher education – particularly its inclusion in a different form of linkage to the needs of economic development – it is interesting to assess what is riding on the introduction of this new right and to try to grasp its current and future implications.

To understand the role that the accreditation of prior experiential learning (APEL) could play in the development of higher education, it is important first to establish the nature of this certification system – which for the moment is very typically French – and how it fits in with the possibilities opened up by lifelong learning. Then we need to examine the problems facing higher education today in relation to the questions asked of it by prior learning. It will then be possible to set out the problems that this system could solve, both in France and abroad, provided that certain resistance can be overcome.

(1) This was a clear finding of CAPLA's Sixth International Forum on Prior Learning Assessment and Qualification Recognition, held on 14-18 October 2006 in Fredericton, Canada. See [http://www.capla.ca/2006_conference/pages/e/ \[04/06/2008\]](http://www.capla.ca/2006_conference/pages/e/ [04/06/2008]).

Accreditation ‘à la française’ for university

Why is such *generous* accreditation offered in France? Even if this apparent generosity is not borne out in practice, it appears at least to illustrate France’s fondness for qualifications. This fondness can be understood only in the light of the role of qualifications in the production system (Germe, 2000) as well as in the education system (Duru Bellat, 2006).

APEL and other means of obtaining certification

Qualifications between education system and production system

Promoting a right to acquire a qualification through accreditation no doubt reflects France’s *structural* fondness for qualifications, which is far more than symbolic. What this involves is the merit-based school system’s need for feedback. Benchmarks need to be found to allow the efficient circulation of student flows. Add to this the system’s pronounced social differentiation – a product of the *Ancien Régime* and modernised with the advent of the Napoleonic Empire (from 1802): birth of the baccalaureate, differentiation of pathways, ‘scholarisation’ of vocational training and a major expansion of university while intermediate training marks time. Qualifications literally make the initial training system function by defining and legitimising the selection process and the modes of learning it entails.

Moreover, in a production system marked by a difficulty in establishing social compromises and collective regulation, it is important for a third party to be able to intervene to define the value of work. This value will be determined by laws but also by the external third party, which is constituted by the education system. In addition, there is also a place system, characteristic of relatively immobile societies, which requires that qualifications be able to contribute to legitimising these places and their continuity. ‘Closure strategies’ (Lallement, 2007) are developed, in which qualifications play a crucial role. Thus, the education system and the production system combine to give public certification a global reference function in the educational pathways of individuals, from childhood to adulthood. This favours not only the qualification itself but also all procedures granting access to it. This is the historical backdrop to the expansion of accreditation.

APEL in universities

The desire to promote accreditation is particularly marked in French universities; unlike other levels, the university level is characterised by the coexistence of three measures: Accreditation of Prior Learning (APL), VES (*Validation des études supérieures*) Validation of Higher Education Studies, and APEL. The first measure, which many countries now also have, is the product of a 1985 decree and provides access to degree studies, with possible partial exemptions. The second, initiated at European level and actually implemented in universities since 2005 (in many cases only slowly), aims at establishing equivalence between higher education qualifications awarded in France and abroad. The third measure gives the right to obtain a qualification, partial or full, on the basis of the accreditation of experience, professional or otherwise. In fact, these measures are an expression firstly of a differentiation and hierarchisation of the various modes of access to qualifications. The latter reflect the conflicting stresses at work between a desire to protect higher education qualifications and the need for international openness of certification.

Although APEL dates from 2002, its precursors go back even further. Access to qualifications through validation of prior experiential learning emerged for engineers in 1933, when the Malthusian elitism of engineering colleges created tensions in the market for technical executives (*cadres supérieurs techniques*); it emerged in activities dominated at once by the intrinsic selectivity of the tasks to be carried out and the material nature of their results. It was a matter of simultaneously solving a problem with the operation of the labour market and a failure of the initial training system.

The real innovation of 2002 is its *universality*, with a few notable exceptions: certain sectors (health, social work, and personal care), certain types of qualification (university degrees, *diplômes d'État* – State qualifications), etc. Even these exceptions are currently being reduced: APEL for special education teachers, home helpers, nursing assistants, and soon for nurses. At university, a strong incentive is emerging to replace *diplômes d'université* (DUs) with LMD degrees ⁽²⁾, particularly the vocational degree, to enter them

⁽²⁾ LMD – *Licence, Master, Doctorat* – is the French version of the triptyque introduced under the Bologna process and the European Higher Education and Research Area. In English: Bachelor's Degree, Master's and Ph.D.

in the National Professional Certificate Register (RNCP) ⁽³⁾ and thereby make them 'accreditable'.

The meaning of APEL

To understand the significance of the changes brought about by the introduction of a right to APEL, we need to distinguish the certification from the actual training and identify the nature of what is 'translated' in and by this procedure ⁽⁴⁾.

Differentiating training and certification

The right to APEL dissociates certification and the path by which it is reached, which usually consists of training. This is clearly the spirit of the 2002 reform: favouring a certification analysis over a training analysis. This implies that certification is somehow in demand for its own sake, like a currency whose marketplace is the only internal or external labour market (and its segmentation). This separation appears to be linked to the fact that, in France, qualifications have become increasingly necessary to gain entry to the labour market or to protect careers that have become uncertain.

This demand for certification for its own sake creates the fear, expressed in some quarters ⁽⁵⁾, that the value of qualifications will diminish further as APEL expands. However, this alone cannot constitute a factor that reduces the value of higher education degrees. Not only has the increase in the number of degrees remained moderate, with barely 1 to 2 % of degrees conferred by universities awarded by this route, but, to be permanent, the devaluation must be based on a loss of the intrinsic value of degrees induced by APEL. However, this is not borne out by the enormous effort required of candidates and by employers' increasingly insistent demand for the right to be exercised.

As we shall see, in a context where there is little continuing training leading to a qualification, APEL can provide an alternative.

⁽³⁾ The National Professional Certificate Register (RNCP) is a database of certificates for vocational purposes (degrees, diplomas, CQPs (vocational qualification certificates) (*certificats de qualification professionnelle*) recognised by the State and the social partners, classified by field of activity and/or by level, available on the website of the CNCP (Commission nationale de la certification professionnelle) National Vocational Certification Commission.

See <http://www.cncp.gouv.fr/index.php?page=23> [04/06/2008].

⁽⁴⁾ Certification Commission. See <http://www.cncp.gouv.fr/index.php?page=23> [04/06/2008].

⁽⁵⁾ See, in particular, the joint work coordinated by F. Neyrat (ed.), *La VAE: la reconnaissance d'un nouveau droit*, Bordeaux: Published by du Croquant, 2007.

It is a peculiarity of France that it has one of the highest proportions of young people educated to age 18 in Europe and, at the same time, 'a proportion of adults aged 25 and over who are studying or resuming their studies lower than anywhere else' (Marion et al., 2006). This situation is no doubt related to a historical tendency to transfer responsibility for vocational training to the initial education system. This has led, in particular, to the relative weakness, until recently, of apprenticeship and to the 'scholarisation of vocational education' (Pepel and Troger, 2001).

In fact, the growing dissociation of training and certification is part of a historic trend in the labour market and its regulation: a logic of human capital and signal is gradually being replaced by – or combined with – a dynamic of investment in form; labour supply regulation is giving way to labour demand regulation. In fact, companies formulate 'the need to promote certification as an indicator of the productive value of individuals and not endorsement of training' (Grandg erard, 2007). For this purpose, they are seeking to increase the number of long-term confidence indicators and elements that reduce uncertainty as regards the value of work (Rose, 2006). APEL appears to be of this ilk.

A way of translating the collective to the individual

APEL has to do with *distillation*, in three ways. Firstly, the experience submitted for accreditation is necessarily the result of a shared activity; the candidate therefore has to extract himself from this collective so that he can be picked out. Secondly, the candidate is necessarily the product of organisations marked by an entire set of characteristics which are collective in both the functional and legal senses of the term. The majority of failures of managers in APEL at university are attributable to what candidates owe to functionally and conventionally divided and segmented organisations offering too little scope for independence and responsibility to authorise personal enhancement leading to accreditation (Triby, 2004). Finally, candidates come to the APEL process following a career weighed down by a set of social conditions from which it will be difficult for them to *separate themselves*, literally speaking.

However, it has to be recognised that French universities are heirs to a school system based essentially on the construction of a highly individualised process of evaluation, selection and orientation. This process has now been reinforced with the extension of schooling and the arrival of 'nouveaux lyc eens' in higher education. So-called merit and 'healthy competition' have merely created processes

justifying an orientation that denies quite systematically the entire collective dimension of 'the school experience'. In this context, the triple distillation carried out by APEL places academics at odds with the conception of their role and their power of approval.

APEL and LLL. Certification of the pathway *versus* protection of the pathway

Accreditation of Prior Experiential Learning (APEL) is clearly in line with the concept of lifelong learning (LLL). In this respect, one may therefore wonder whether certification during working life, as permitted by APEL, in particular for the most highly qualified people, is liable to increase the security of these pathways or simply to accustom people to a working life marked by insecurity. Benefiting from phenomena such as the extension of schooling, itself associated with qualification holders being *churned out* and devalued, universities have been able, until recently, to consider themselves as being unaffected by such concerns, with their qualifications protected against unemployment and, above all, guaranteed a sustainable position in the labour market (Germe, 2000). It has to be accepted that this is no longer the case today.

To understand this change, it is necessary to remind ourselves of the meaning of lifelong learning. It is not just a statement or a political slogan; this project sanctions the desire to overhaul the modes of regulation between the educational sphere and the productive sphere. However, from the point of view of APEL, it is rightly noted that 'the valuation of "practical" knowledge and experience originates, along with other parameters, from a desire to reconstruct the relationship between education and production, between national and local' (Grandgérard, 2007). Lifelong learning operates on the basis of four guiding principles, each questioning both higher education and APEL (Mahieu and Moens, 2003):

Access to learning has to be freed of all constraints linked to the ages of the learners and the context of its acquisition. The issue for universities is clear: they must no longer reserve their essential educational activities to initial training but should be more open, not only to adults but also to other ways of studying for degrees: apprenticeship, alternance training, continuing training, etc. The development of APEL fits very naturally into this approach not just because it encourages adults to go on to university to make up any unaccredited parts of their qualifications, but also because this system provides a strong incentive to resume studies.

Giving adults the means to respond more flexibly to the changes at work within society. University education has been able to function for decades on the basis of the belief that general training constituted the best preparation for any necessary adaptation to changes in working activity and environment. This has now been called into question. APEL, in this respect, addresses the problem in two ways: by allowing access to a degree, it increases the potential for mobility and hence adaptability to change, and by favouring reflection on one's experience and thinking in terms of transferable skills, it is likely to help individuals get back on their feet in changing occupational circumstances.

Countries are invited to 'reflect on their education systems, focusing on individual requirements'. Initial training, particularly higher education, not only has to open itself up to training adults, but to become the place to implement a guidance plan and to respond to certain characteristics of the education demand coming from this section of the population. 'Downstream management' of the university training system is emerging, less through the search to meet the requirements of the production system than through the realisation of what adults are entitled to expect from universities.

Any acquisition of knowledge or skills is accorded equal legitimacy. It is not simply a question of 'the equivalence' of experiential learning and formal knowledge, but more the process of accessing knowledge, particularly formal or academic knowledge, called upon to justify what its purpose is, in real terms. This is no doubt the most crucial change that has occurred with respect to higher education and it affects the very presuppositions of APEL: 'the strongest resistance, particularly among teaching staff, is not to the principle of the accreditation of learning, but to this kind of equivalence of learning methods presupposed by the law in according the same approval to both forms of learning' (Merle, 2004).

This questioning operates on three levels. Firstly, success in higher education requires the most radical 'conversion'. As we know, in France, this takes place at least as much through an autonomisation that is as brutal as it is anarchic (particularly in undervalued courses) as through the rigour of an education that requires people to part with their conceptions (Coulon, 1997). With APEL, the need for conversion becomes less urgent. Secondly, university teachers are selected on the basis of a distinction: not only knowledge but first of all a mode of access to this knowledge; they are subject to tests that prove their admission to a type of *higher* knowledge. With

APEL, university teachers have to recognise that this hierarchy is losing its legitimacy. Thirdly, it is, in a way, the social standing of the university that is called into question: universities produce scientific knowledge and have the task of passing it on and subjecting it to debate. With APEL, they are called on to approve knowledge that they have neither produced nor passed on and have to recognise that this knowledge *is equivalent* to their own.

The direction of change taking place in universities

APEL is developing in a higher education context that is far from exclusive to France. Even the rather general nature of these conditions poses a problem. We feel that three of these conditions should be looked at in more detail given the questions raised by APEL: the purpose of extending schooling, internationalisation and vocationalisation.

The purpose of extending schooling

The continual extension of schooling, which began in the 1980s, now seems to be slowing down. However, an inherent momentum continues to drive young people to pursue their studies well beyond what they need to fill the posts that will be offered to them, giving them skills that are ill-suited to current work requirements (Duru-Bellat, 2006). Universities are particularly affected by this phenomenon. This momentum has a cost for the individual and for society, and is ultimately unproductive. To stop this momentum, two changes are needed: first, a change in the terms and conditions of students' learning activity, and secondly, greater selectivity of education levels. When designing courses, priority should be given to creating and implementing learning environments and to an activity/situation-based approach. Moreover, like other European systems, the education system in France, particularly the university education system, cannot avoid introducing selection thresholds and, in particular, favouring returns to certificate courses after a period in the workplace rather than initial training qualifications that are incomplete or difficult to take full advantage of in the market.

This approach means acknowledging the inability of continuing training to be a 'second chance' for those who failed at school. Like V. Merle, it is possible to make the following hypothesis about the various reforms in continuing training: 'it is as if the reformers were regularly trying to find a solution to impossible school reform

by promoting continuing training' (Merle, 2004). Efforts towards continuing training have to be increased, but if we want to approach equity somewhat, they need to be supplemented by two other elements: development of APEL and a preoccupation with enriching vocational activity to make it more 'learning-based'.

Internationalisation and the *need for mobility*

As with other needs in a market economy, the need for workforce mobility is first of all relative to a state of market operation and to the justifications produced to secure recognition of the apparent needs for mobility; the real, social need is different, but it is not necessarily the reason why people move. Except in a few specialised professions (particularly in IT), mobility within initial training is not necessarily expected as a 'signal' of high qualification levels: it is possible that the LMD system, which promotes the comparability of degrees, is making mobility less desirable (not to mention distance training designed 'in order to' avoid mobility). Universities and the *Grandes Écoles* are trying hard to increase the number of qualifications recognised around the world (Master's, MBAs), which, in the end, further serve to keep the best students and introduce new recruitment criteria rather than favour genuine mobility. Therefore, from an international perspective, the equivalence of qualifications could produce an effect opposite to that sought: a decline in mobility.

However, internationalisation remains in the background under the pressure of globalisation: all work activities and their modes of performance need to be profitable, irrespective of where they are carried out and without requiring workers to move. Mobility is perhaps more inter-sectoral than international. The striking thing about the 'university expectations' of university degrees (Bachelor's and Master's) is the 'cross disciplinary' nature of this knowledge and know-how (cf. Table 1). Even for vocational degrees, it is the transferability of knowledge and skills that counts. This tends to show that, particularly for higher education qualifications, the constraint of mobility is an incitement to have the ability to perform functions in different activity fields. It is also worth noting that the fields of reference refer less to vocational provisions than to an ability to generate efficiency and maintain this 'valorité' ⁽⁶⁾ (Stankiewicz, 2002).

⁽⁶⁾ 'Valorité' is a neologism invented by Stankiewicz to refer to a person's or object's ability to contain a potential value or a potential of value. This corresponds to a desire to attach importance once again to value and to its place in economic and social mechanisms.

Table 1. Fields of reference for skills to be evidenced at university

Fields of reference	Bachelor's level	Master's level
<i>Knowledge</i>	Knowing the basics of a field and placing them in the development of this field	Having expertise in one's field
<i>Information skills</i>	Determining information needs and mastering the tools and techniques required to meet them	Assessing the quality of the information and of its sources
<i>Methodology</i>	Understanding the contribution and the limits of intervention methods	Having expertise in intervention methods
<i>Implementation</i>	Using a body of knowledge and a set of tools in practice	Completing an intervention project that meets the standards and requirements of one's field
<i>Interdisciplinarity</i>	Demonstrating an openness to other disciplines and placing one's own field	Considering the perspective of other disciplines in one's research and intervention
<i>Continuing learning</i>	Identifying one's need to bring oneself up to date in one's field	Continually developing one's skills in research, creation and intervention

Source: Ministry of Education, France.

The vocationalisation of higher education studies

The growth of APEL makes it easier to understand the modes of professionalisation of higher education. This does not come down to increasing the number of vocational courses; it concerns the content of the teaching and its modes of transmission when 'the ability of the initial training system to transmit knowledge is hindered by the multiplication of modes of learning' (Merle, 2004, p. 130). This is, above all, a reflection of the questioning of the hierarchy and the stability of knowledge underlying university education.

Putting in doubt. This operates on two levels: the level of the individual who is being asked to recognise the latent impoverishment of his skills in an increasingly demanding market, and the level of the university, which is seeing the monopoly of its principal social functions seriously challenged. The challenge to qualification from individuals is based on new concepts, 'the main one being based on the notion of an individual as a purposeful and rational actor, who is responsible for his employability, and the value accorded to

a mobile and flexible individual who is quick to learn and explain and has obtained or is able to obtain qualifications, in other words who is always required to prove himself in the name of mastering his own career pathway' (Maillard, 2007).

At university level, the change in perspective is no less radical. The social standing of universities is based on the coherence of three main functions: the production of academic knowledge, the transmission of this knowledge and control of the discussion and exploitation of this knowledge. However, universities are increasingly required to come to terms with other actors in relation to each of these functions. Moreover, the coherence between these three functions is itself being challenged by an ever greater interdependence with phenomena such as the growth of corporate research, necessarily shorter innovation cycles, the socialisation of scientific debate and the growing popularisation of knowledge through the media.

Putting into practice. The vocationalisation of universities does not correspond so much to the increase in the number of vocational courses to the detriment of academic courses as to the intrusion of the question of vocational practices into the very heart of the transmission of knowledge. This operates on three levels: the intelligibility of these practices, the transformation of practices and the production of legitimate representations of this change. 'The analysis of professional practices – understood as a research tool, a training tool and a tool for transforming practices – has acquired enormous social significance' (Barbier, 2001). Even general courses have been affected. They have to think about what they can teach their students, formally and informally, and about which employment-like learning situation they can place them.

Putting to the test. The translation of qualifications into skills and knowledge accessible through work experience flows very naturally from this development. This exercise only makes sense if the training itself is organised on the basis of tests and assessment tools capable of confirming that these skills have been acquired. As a partial response to this requirement, the *Europass* was conceived at European Community level in order 'to give each individual a passport proving their career pathway in terms of formal, informal and non-formal learning' (HCÉÉE, 2004). Benefiting from the introduction of the LMD, French universities are incorporating this into their training by drafting the 'diploma supplement' with the dual aim of being able to enter all of their degrees, including 'general'

qualifications, in the national qualification framework (RNCP) but primarily of gradually introducing an overhaul of the very design of their training. This reform should be implemented all the more quickly because it has found fertile ground among students who are fearful that their position in the labour market is being weakened. An approach to training that focuses more on making them 'operational' would more readily win their trust.

What is striking here is the fact that the rise in the popularity of APEL in universities is fully in line with the requirements of this vocationalisation so that it also confirms the characteristics of the 'diversification' in which higher education in Europe is engaged (Dunkel and Le Mouillour, 2006, p. 10).

Prospects. The future of APEL in higher education

Whatever the national context, the introduction and development of APEL at universities require certain conditions to be met (Triby, 2006), and France may not be ahead of its main competitors in this respect.

The obstacles and how to overcome them

The knowledge-to-be-acquired approach. This knowledge is usually acquired as a result of training, the existence of which is proven by examinations. This approach incorporates the idea, which is widely accepted in higher education, that such knowledge is all the more substantial because of social and academic selection on entry to a training level. This belief sets little store by the impact of the evaluation system itself, which translates knowledge into units of measurement and selection, and still less by the actual learning activity. This activity lies at the heart of the construction of an APEL dossier, which cannot confine itself to simply weighing up the knowledge acquired.

The implicit hierarchy of knowledge. The higher education system in most Western countries is based on a more or less implicit hierarchy of knowledge that resolutely places academic knowledge at the level of higher education, above a whole range of forms of knowledge derived from practice – from professional knowledge, which is often highly sophisticated, to low-level and routine practical knowledge. APEL does not turn this hierarchy on its head, but demands, firstly, that experiential learning be considered to have the same standing as academic knowledge, provided it has been subjected to critical

appraisal, and, secondly, that academic knowledge be considered appropriate only if links can be found to actual skills and knowledge required in employment.

The importance of qualifications for individual careers. When the value of the work is still determined to a great extent by collective and legal measures, it is hard to challenge the criteria of qualifications and experience in the labour market. As soon as there is any tendency to call those criteria into question, particularly by introducing a skills-based approach, the methods of accessing qualifications, and the individual characteristics of the qualifications, assume greater importance. This is precisely what is happening with APEL, which is proving to be a system necessarily linked to a different approach to the value of work based on a different relationship to knowledge. It is also characteristic of this procedure that it translates collective experience into individual value while the effectiveness of skills 'that are difficult to formalise usually remains collective' (Lallement, 2007, p. 145).

Available resources

The downstream logic of training. Training practice has shown that the determining factor in the learning activity is all the testing and outcomes. It is what comes after training that gives this activity form and meaning. We have to overcome the belief that the training activity is intrinsically motivated and, and above all, that testing is neutral as regards the trainee's performance of his or her activity. The shift required by APEL involves taking full measure of this determination downstream to try to give meaning to the experience being acquired while creating the possibility of its exploitation from initial training on.

The value of human capital. The consensus on the efficacy of the level of education has been a considerable obstacle to more extensive studies into the nature of this particular form of capital, which is capable of increasing its value through its very use, and into the importance of the psychosocial relationship with the job and with attitudes to change. However, 'priority should be given to approaches (proposing) better measurement of the yield of human capital, (or) integration of psychological or behavioural features into the economic model for determining salaries (...) rather than an umpteenth estimation of the traditional *Mincerian* model' (Baudelot et al., 2004, p. 220). It is not simply an invitation extended to economists: it is another way of looking at what generates the value of the training offered. APEL assumes this other point of view, which to a considerable extent remains to be constructed.

Those conditions prove that APEL cannot be conceived of as a simply as a system of access to qualifications. It tends to call into question what lies at the foundation of higher education practices, particularly in France: not so much structures and references as beliefs and intentions. These are no longer sufficient when higher education becomes mass education and has to form part of lifelong learning.

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Higher education and adult motivation towards lifelong learning

An empirical analysis of university
post-graduates perspectives

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SUMMARY

The increasing role of higher education (HE) in lifelong learning processes seems to be a trend in the global context of the knowledge society. As in many other European countries, the rapid expansion of HE in Portugal in the last decades has resulted from democratisation of access and increase of participation at the tertiary level of education. The Portuguese post-graduate offer at universities has also increased and diversified in recent years, proving that there is a need for post-initial education across the lifespan of individuals. In this article, we intend to discuss some of the results obtained through a survey centred on the educational and professional trajectories of post-graduates from a group of Portuguese universities. We try to understand adult perspectives about learning and discuss the adult motivational dynamics towards their future learning.

Keywords

Adult learning, adult development, higher education, knowledge society, empirical research.

Introduction

This article discusses the importance of adult motivation towards lifelong learning processes. We present some of the results obtained through a survey – developed by an interdisciplinary team and financed by the Portuguese government – centred on the educational and professional trajectories of post-graduates from a group of Portuguese universities. We try to understand adult perspectives about learning and especially discuss adult motivational dynamics towards their future learning – in the framework of lifelong learning processes.

We try to understand what types of motivation are more relevant for this group of adults, and the influence of factors such as gender, age and professional activity on the motivational process. We should also like to point out some new challenges that higher education is facing in redefining learning boundaries and reflect on the role, strategies and practices of a provider of multiple and diverse opportunities for adult learning and development.

Lifelong learning and higher education

The knowledge and lifelong learning society

The many different forms of provision, between education, training and leisure (Edwards, 1997) across boundaries, shows the complexity between education, training, work and employment. The policy discourse on lifelong learning – lifelong and lifewide – puts emphasis on learning and learners, and places a bigger emphasis on adult responsibility.

The European Union targeted the year 2010 for building a strong knowledge-based society and economy. The European employment strategy and Member States' political agendas established as a priority investment in lifelong learning activities. European education and training policies keep on stressing the need for raising the population qualification structure, related to economic and social goals, and put emphasis on acquiring qualifications relevant to employment and working life. Lifelong learning is considered as one of the key factors of the knowledge society and economy, and it is considered by the European Commission a crucial element for the transition to 'the knowledge based-society', and an important answer to the challenges of globalisation, competitiveness and employment. The European Commission considers there is a need for comprehensive and coherent strategies for lifelong learning.

However, several studies on lifelong learning and new challenges for education and training systems in European countries point out a need for substantial improvements, specifically regarding adult learning. As summarised by Gordon (2004), there is still considerable progress to be made to broaden access, remove existing barriers, develop new paths and structures to qualifications, and respond to the needs of adult learners.

According to a study carried out by OECD (Pont, 2004), there are many reasons for non-participation in adult education and training: among others, lack of information, time, motivation, incentives, funding. Although not always put forward in many studies, lack of motivation is an important and significant reason. For the author, it is the 'people who have the highest educational attainment levels who feel they would like to participate and who actually do participate more, revealing a close complementarity between initial education and adult learning' (Pont, 2004, p. 35).

There is a lack of studies and research on adult reasons and expectations regarding learning, education and training, especially from a lifelong and lifewide perspective. Their reasons, interests and needs are seldom known in depth, although they play a fundamental role in their demand and participation in education and training activities.

It has been pointed out by several studies that adults' motivation to participate in learning activities – in continuing education and training – are multiple, complex and subject to change (Merriam and Caffarella, 1999). Nowadays understanding the motivational structure related to adult learning is becoming more and more important, specifically in the knowledge society and lifelong learning society. The relevance of adult learning is widely recognised for equity and social cohesion, democracy, employment and economic development.

Higher education and the knowledge society

The increasing role of higher education institutions in lifelong learning processes seems to be a trend in the global knowledge society. As stressed in the outcomes of the world conference on higher education (WCHE) in 1998, with globalisation, higher education has become recognised as a significant catalyst for social and economic progress due to the creation, dissemination and application of all forms of knowledge (Kearny, in Eggins, 2004).

Higher education has become in recent years an important sector for providers, creating new opportunities for lifelong learning.

In 2004, just over 17 million students were enrolled in tertiary education in EU-27 (ISCED levels 5-6), representing a little more than 15 % of all those enrolled in education in Europe (ISCED levels 0-6) (1). If we look at the data on higher education 'in the EU-27, the student population in tertiary education is continuing to rise relatively fast (by over 10 % in 2004 compared to 2001). The growth of enrolments is slowest in ISCED level 5B programmes (3 % between 2001 and 2004, with a net decrease between 2003 and 2004), whereas student enrolments in an advanced research programme (for a doctorate at ISCED 6) increased by over 20 % in three years' (European Commission, 2007).

As in many other European countries, Portugal has witnessed general improvement in the population level of education and training in recent years. Increasing political concern to widen access to HE has been developed in parallel with raising the level of qualifications. However, compared to other countries, it still represents lower levels of education and training qualifications. Nevertheless, the rapid expansion of HE in Portugal in the past two or three decades has democratised access and increased participation at the tertiary level of education. Enrolments in tertiary education (ISCED levels 5-6) as a percentage of the total number of students in the year of 2003/04 is about 18 %, which is slightly above the European average, 16.4 % (European Commission, 2007).

Portuguese post-graduate education at universities has increased and diversified in recent years – namely the masters (*mestrados*) and PhD –, proving there is a need for post-graduate education across the lifespan of individuals.

However, HE institutions are still trying to find their own roles, strategies and practices as providers of multiple and diverse opportunities for adult learning and development.

As sustained by Merriam and Caffarella 1999, p. 45, participation in adult education is largely a voluntary activity, so 'providers of adult education therefore need to know who is participating, why they are participating and what conditions are likely to promote greater participation'.

Nevertheless, as we stated before, there is still a lack of studies on adult learning processes, particularly on adult motivation (reasons, interests and needs) towards lifelong learning – specifically in tertiary education.

(1) European Commission (2007), *Key data on higher education*, Eurydice/Eurostat, p. 37.

Conceptual framework

The conceptual framework of this specific part of research – adult motivations towards lifelong learning – is based on the descriptive Carré model (1998, 2001) on adult motives and orientations towards learning and training activities.

From this model, and based on analysis of our empirical data, we introduce a new concept for adult motives of implication. We raise the hypothesis of creating a new category of reasons that we identify as existential motives, given by adults for participating in lifelong learning processes.

The Carré model on adult orientation and implication on learning and training activities considers two main dimensions: the content of motivation (the motives of implication) and the process of motivation (the dynamics of implication). According to the author, the content of motivation are the reasons acknowledged and given by adults to explain their learning/training choices. Regarding adult motivation, this model considers two main orientation axes: one on the intrinsic/extrinsic orientation, and the other one the orientation towards learning/participation.

The first axis, intrinsic/extrinsic orientation, is theoretically based on the concept (Deci and Ryan, in Carré, 1998) that the main motive to learn is the satisfaction gained by the process of learning itself; the main result of the action is intrinsic to the activity of learning. The extrinsic orientation exists when learning is a means to obtain external goals or results.

The second axis, orientation towards learning/participation separates motivation to acquire learning content (knowledge, skills, attitudes, etc.) from motivation to participate, which means the main reason is being present and participating in training activities, independently from the type of knowledge acquired. In this case, participation in learning activities is related to anticipating a result, independent from acquiring knowledge.

According to this model, the intrinsic motives, – the learning process itself is the source of satisfaction and pleasure; the results and the process are interrelated – are the following:

Intrinsic motives

The epistemic motive

Learning and knowledge are a source of satisfaction and pleasure. Motivation is linked to its own content: to learn, acquire knowledge, skills, attitudes, etc. Motivation is linked to the content ('I like everything related to economics', 'I like the intellectual perspective of things'). The emotional dimension is a presence in this type of motive (to like, to love, etc.). And sometimes the pleasure of learning is orientated to the opening of the mind, metacognition development, and the aim is to widen and enrich the spirit.

The socio-emotional motive

Adults are interested in learning/training activities because they want to establish social contacts, to develop new relationships; they want to be integrated into a group, they want to communicate, to reinforce social links. The emotional dimension, the pleasure to be with others is present in this motive.

The hedonic motive

Adults participation in learning activities is also related to the pleasure to participate, but linked to the conditions of the training environment itself, with the materials, the resources, documents, etc. Pleasure is independent from the content of learning.

In the Carré model, the extrinsic motives are those linked to the satisfaction or reward externally obtained from the learning/training process. The process and the results are different and separate. Learning is seen as a means to obtain other goals, which are external to the process. Within this group of motives, we can identify:

Extrinsic motives

The economic motive

Reasons for participation in learning activities are explicitly material: economic advantages (direct or indirect – such as a promotion, or to get a job).

The prescriptive motive

In some cases participation is due to explicit external pressures, such as an obligation or an imposition, coming from an external context. Sometimes there are more subtle pressures, such as the social pressure to conform, influences of hierarchy, and so on.

The derivative motive

The reason for participation is to avoid unpleasant situations or activities; adults prefer to participate in learning/training activities to escape from suffering or boredom at work (such as unhappy environment, routine, lack of professional interest, personal conflicts, etc.).

The professional operative motive

The reason for learning is related to developing competences, knowledge and skills that are needed for specific professional activities. The aim is to improve professional performance, to anticipate or adapt to changes. Learning is 'a professional tool', an instrumental answer to a professional challenge. It is related to the classical function of continuing training (development of competences).

The personal operative motive

Adults learn to get competences, knowledge and skills that are understood as necessary for activities outside the job and working life (such as leisure, family life, associative responsibilities, and so on), but always with a clear goal. Learning is a means to a project, an interest, or to satisfy a specific need.

The identity motive

This learning motive is for acquiring competences, knowledge, skills or symbolic recognition to transform or preserve adult identity characteristics. This motive can be understood from the perspective of professional, cultural or social status (to get a diploma, a qualification, to keep or get a position, etc.). It is centred on social image, and is external to economic motives.

The vocational motive

Learning is orientated by a logic of professional guidance, carrier management, or getting a job. Adults want to develop competences, knowledge or skills to keep their job, get a new job, or improve their job (they refer to 'career', 'mobility', 'professional future', 'opportunities', and so on.).

As we have already mentioned, the Carré model points out that it is also necessary to understand the process – the dynamics of learning implication –related to the action itself (enrolment and participation in training activities). From the theoretical point of view, this process is based on three dimensions: sense of self-determination, perception of competence and the project (Deci and Ryan, Nuttin, 1980, in Carré, 1998, 2001); understanding the motivational framework of adults results from the links between these three factors ⁽²⁾.

According to the model, adult motives are not commonly exclusive, they can be diverse and combined (with a minimum of two), in an 'individual original constellation' and contribute to the construction of 'personal motivation frameworks'. These frameworks try to understand the adult relationship with learning, at a specific moment, and the motivation that orientates the adult towards that learning situation.

⁽²⁾ The question used in the questionnaire regarding future learning is only related to adults' reasons to learn in the future; we centred our analysis on the content of motivation.

To understand adults' relationships with learning, it is also important to identify the main obstacles and barriers. From the theoretical point of view, adults barriers to participation in learning activities combine psychological and social factors; interpretation is only possible if we analyse the interaction between structural factors and the individual 'conceptual apparatus' (Rubenson, 1998, in Merriam and Caffarella, 1999).

According to several authors, we can identify situational and dispositional barriers, and also institutional barriers (Cross, 1991, in Merriam and Caffarella, 1999). There are dispositional factors (internal barriers, through attitudes, such as age considered adequate to learn), situational factors (external factors that escape individual control, such as the cost of the fees) and institutional factors (related to practices and procedures that prevent adult participation in learning).

Methodology of the study

The discussion of this paper is empirically based on the results of a research project developed by an interdisciplinary team⁽³⁾ and financed by the Portuguese government, between 2003 and 2006 – 'Project Telos II – Lifelong learning: evaluation of the effects on post-graduates in higher education' centred on the study of the educational and professional trajectories of post-graduates from a group of Portuguese universities. In this paper, we try to understand and discuss the motivational dynamics of this group of adults towards their learning – in the framework of adult lifelong learning processes.

The study aims to characterise the education, training and work trajectories of a group of adults with higher levels of qualification that have obtained a master's degree (*Mestrado*) and/or PhD in the academic years of 1995/96 and 2000/01, in the four universities that participated in the project: Universidade Nova de Lisboa, Universidade de Lisboa, Universidade Técnica de Lisboa and Universidade de Aveiro.

The academic and post-graduate services provided us with exhaustive lists of people that finished their post-graduate degrees. From 569 graduates (449 masters and PhD), we contacted 440 post-graduates (343 masters and 97 PhD) and sent them a questionnaire

⁽³⁾ The research team was composed of researchers from the Universidade Nova de Lisboa (Faculdade de Ciências e Tecnologia), Universidade Técnica de Lisboa (Instituto Superior de Economia e Gestão), Universidade de Lisboa (Faculdade de Psicologia e Ciências da Educação) and Universidade de Aveiro.

by mail, in 2005. A month and a half later we resent it by mail. This provided us with 145 replies, corresponding to 32.95 % of all recipients, which is within the acceptable limits for this type of survey.

Research continued through different stages and using different instruments of data collection – a questionnaire and interviews to post-graduates and universities post-graduate education coordinators. In the first stage, the research team developed the questionnaire, divided into four main sections: personal and social characteristics; academic trajectory; professional trajectory; evaluation of academic training ⁽⁴⁾.

Demographic and socioeconomic characteristics of participants: age, gender and formal education

The national sample for our survey consisted of 145 (128 masters and 27 PhD respondents), who finished their post-graduate studies in the years 1995/96 and 2000/01 in the four Portuguese universities mentioned. On gender, 69 respondents were males (47.6 %) and 76 females (52.4 %).

The majority of respondents belonged to the group 25/39 years (49 %), followed by the group 40/54 years (41 %) and those of 55 years and over (10 %). The average was 41 years.

More than half of respondents were married (61.8 %) and the others single (25 %), divorced (9 %) or living together (4.2 %).

At the time of the survey, the formal schooling qualifications were: degree and masters – 107; degree and PhD – 5; degree, masters and PhD – 33.

Respondents belonged to different academic domains: engineering, economics, business and administration, sciences of education, supervising.

Results and discussion

We believe adult motivation for learning is linked to reasons, the perception of the contribution/benefits and the satisfaction obtained through learning. In the questionnaire, we tried to identify the reasons, contributions, satisfaction with the academic course and the intention to pursue further learning.

⁽⁴⁾ Some of the questions regarding learning contexts and situations, obstacles to participation and the improvement of professional competence were reproduced, with agreement, from the DG EAC-Cedefop lifelong learning Eurobarometer questionnaire. This survey was carried out in 2003 in 15 Member States, Iceland and Norway, covering residents of all these Member States aged 15 years and over.

(a) Motivation towards master and PhD courses

Respondents stated the main reasons for attending post-graduate courses were: acquiring more knowledge (95.3 % of masters and 94.3 % of PhD) and intellectual development (94.4 % of masters and 93.9% of PhD).

Secondary reasons pointed out by the group of masters concerned the professional domain: doing their job better (86.6 %) and professional progression (74.4 %). For the PhD respondents, to belong to the scientific community (88.2 %) and doing their job better (83.3 %) were other important reasons for attending the course.

Table 1. Reasons for attending the course (%)

Reasons	Master		PhD	
	Very important and important	Little or not important	Very important and important	Little or not important
Possibility of finding a job	39.7	60.3	41.9	58.1
Possibility of keeping a job	36.2	63.8	56.3	43.8
Possibility of changing a job	37.3	62.7	45.2	54.8
Possibility of finding a well paid job	46.5	53.5	51.6	48.4
Not having job expectations	14.9	85.1	12.9	87.1
Doing the job better	86.0	14.0	83.3	16.7
Possibility of getting the desired job	66.9	33.1	81.3	18.8
Progression in the professional career	74.4	25.6	69.7	30.3
Progression in the academic career	62.2	37.8	78.8	21.2
Contributing to the intellectual development	94.4	5.6	93.9	6.1
Belong to the scientific community	54.7	45.3	88.2	11.8
Acquiring more knowledge	95.3	4.7	94.3	5.7
Demands of the company	14.8	85.2	40.6	59.4
Initiative of the company	6.3	93.8	13.8	86.2
Family expectations	5.3	94.7	6.5	93.5
Progressing in studies	66.7	33.3	66.7	33.3
Other situation	85.7	14.3	100.0	0.0

Source: Ambrósio, T. et al (2005) Projecto Telos II.

Expectations regarding learning seemed to be attained, since the majority of respondents considered they were 'satisfied' and 'very satisfied' with the courses (93.5 % – masters and 88.9 % – PhD), and 88.9 % of them would have followed their academic trajectory if they had the possibility to choose again.

Table 2. **Satisfaction with academic training**

Level of satisfaction	Master	PhD
Very satisfied	38.8 %	55.6 %
Satisfied	54.4 %	33.3 %
Little satisfied	5.0 %	11.1 %
Not satisfied	1.4 %	0.0 %

Source: Ambrósio, T. et al (2005) *Projecto Telos II*.

The main contribution of academic training was considered 'learning new things and development at the personal level (97.8 % – masters and 97.4 % – PhD), followed by 'development of scientific culture' (94.9 % – masters and 94.7 % – PhD) and by 'development of knowledge in their scientific area (91.9 % – masters and 81.8 % – PhD).

'Widening of general culture' (89.1 % – masters and 81.1 % – PhD) and 'development of an interest in learning and research in order to develop a permanent learning trajectory' (86.8 % – masters and 84.2 % – PhD) were also relevant contributions of academic training.

Aquisition of new learning, development of scientific culture and knowledge development belong to the epistemic domain.

There seems to be a strong correlation between the reasons for learning, the contributions perceived by adults and satisfaction obtained from learning.

We would like to stress the consistency between the reasons/motives and the perceived contributions of the academic courses. The most valued aspects were the learning process itself, and the most valued reasons are intrinsic and also oriented to the learning process. This relationship is consistent with strong motivation for learning – academic and scientific knowledge –, and with higher levels of commitment to HE courses.

According to post-graduates of this study, personal benefits – acquiring scientific culture and knowledge – were more valued than professional benefits – 'respond to professional needs', 'participate

in the job organisation', 'progress in professional career', and 'make contacts for development of the professional trajectory'. We can also identify these findings in Cedefop's study (Cedefop, Chisholm et al., 2004) in all countries, where personal benefits were more valued than work-related ones.

We should also like to point out that economic benefits – 'raise the economic income' – were not considered a relevant contribution for post-graduates (about half the masters respondents and a third of PhD respondents).

Table 3. Contribution of academic training (%)

	Master		PhD	
	Contribute a lot and contribute	Contribute little or nothing	Contribute a lot and contribute	Contribute little or nothing
Learn new things and development at personal level	97.8	2.2	97.4	2.6
Respond to professional needs	73.0	27.0	83.3	16.7
Widen general culture	89.1	10.9	81.1	18.9
Establish personal and professional contacts for development of the professional trajectory	53.3	46.7	69.2	30.8
Guarantee a high social status	23.5	76.5	40.5	59.5
Change the family situation	11.0	89.0	21.6	78.4
Obtain a diploma	76.9	23.1	84.2	15.8
Develop a critical vision of the world	75.0	25.0	67.6	32.4
Progress in professional career	69.6	30.4	78.9	21.1
Participate in job organisation	71.9	28.1	89.2	10.8
Develop interest in learning to develop a permanent learning trajectory	86.8	13.2	84.2	15.8
Contribute to personal and social development	84.7	15.3	76.3	23.7
Raise economic income	48.1	51.9	66.7	33.3
Develop scientific culture	94.9	5.1	97.4	2.6
Develop knowledge in the scientific area	91.9	8.1	94.7	5.3
Make decisions reflexively	78.5	21.5	83.8	16.2

Source: Ambrósio, T. et al (2005) Projecto Telos II.

(b) Barriers and obstacles to learning

The main reasons for not studying are lack of time and difficulty balancing different obligations, specifically professional ones. According to respondents, 'Professional obligations take too much energy' (65.5%) and post-graduates 'had to quit some or all free-time and leisure activities' (47.6%) to keep studying.

According to research developed by OECD (2003-a, in Cedefop, Chisholm et al., 2004 ⁽⁵⁾) time is confirmed as the most significant barrier to continuing learning, followed by lack of funding. This shows coherence with results from different studies about adult learning obstacles and barriers – reasons for non-participation in adult education – namely lack of time, lack of money, and family responsibilities (Valentine, 1997, in Merriam and Caffarella, 1999). According to Chiousse and Werquin (2005), based on results from an international study, (IALS, 1998-99) adult non-participation is due to time and money constraints and professional and family constraints.

We also identified how finance obstacles are important to post-graduates, 40.7 % of respondents consider that finance obstacles were a 'great obstacle', 33.1 % a 'small obstacle' and for 24.1 % it is not an obstacle to studies or training courses. For 2.1 % of post-graduates, finance was considered an insurmountable obstacle.

Regarding course fees (masters and PhD), most respondents supported payment by themselves (54.9 %), followed by employers' support (13.2 %). Only 7.6 % said that families supported the fees.

It is interesting to note respondents' acknowledgement of the lack of available courses related to their needs: 18.6 % of respondents identified as obstacles to participation the 'non-existence of adequate courses considering their needs' and the 'non-existence of available courses nearby' (14.5 %).

These aspects, according to theory, can be considered institutional barriers to participation. It is important that HE institutions are aware of this type of obstacle and try to diversify post-graduate courses, providing learning opportunities related to their students' needs.

⁽⁵⁾ Cedefop research (2004) shows that 'time' (all time-related obstacles) is considered the most important barrier for 37 % of respondents in the EU on average. Respondents reported that family, work or leisure commitments demand too much of their energy to leave time available for learning. When analysing items separately, family commitments come first, followed by a threat to leisure time, job commitments, and last comes being too old to learn. According to research developed by OECD (2003a, in Cedefop, 2004) time is confirmed as the most significant barrier to continuing learning, followed by lack of funding.

(c) Motivation for future learning

We wanted to know what motivates this group of post-graduates for future learning. The last two questions of the questionnaire were oriented to the future: 'Are you interested in pursuing further learning?' (YES/NO) 'Why?'

Most respondents (117 post-graduates) answered they were interested in pursuing further learning (81 %), while very few respondents (5 post-graduates) said they were not interested in it (3 %); 16 % of respondents (23 post-graduates) did not answer the question.

There are some differences between men and women – 76.1 % of men and 84.6 % of women say YES.

If we look at age groups, there is no significant difference: from 25 to 39, 95.7 % answer YES to this question; the age group from 40 to 54 years presented 98.3 % positive answers, and from the group of 55 and over we got 93.3 % affirmative answers.

The reasons why people were not interested in pursuing learning were diverse and related to different aspects:

- personal aspects – 'I am thinking of retirement and have to think about the family'; 'I am satisfied with my actual level of education/training';
- professional and academic aspects – 'Academic training is far from practical training and does not correspond to the enterprise needs'; 'To be a first grade teacher it's not necessary to make an investment in a personal learning path', 'Not interested in continuing an academic trajectory'.

Analysis of adult motivation: a new category of motives?

We developed a qualitative analysis of further learning reasons presented by adults, based on the Carré model (1998, 2001). However, a new group of reasons emerged from the data. Due to the consistency and specificity of this new group of reasons, we raise the hypothesis that they could constitute a different category of motives.

We identified another reason for learning, a category of deeper motive linked to development of the human being, in the personal sphere. This type of motive is deeply linked to self-development. This can be seen from the following sentences: 'it is part of human

development', 'it gives a meaning to life', 'it is a way of being alive', 'it's a philosophy of life'. In some cases, they appear like a basic need for survival, almost like a biological survival process ('it is a need', 'to stop is to die', 'learning until death', 'to survive', 'when you get to this point, it is irreversible'). We classify this type of reason for adult learning in the same domain as intrinsic motives and learning/process oriented motives. We call it the existential motive.

Deeper analysis of the reasons presented by adults, based on the Carré model (1998, 2001), shows that the motives for learning are not exclusive, they are diverse and sometimes combined – giving place to what the author calls the 'individual original constellation'.

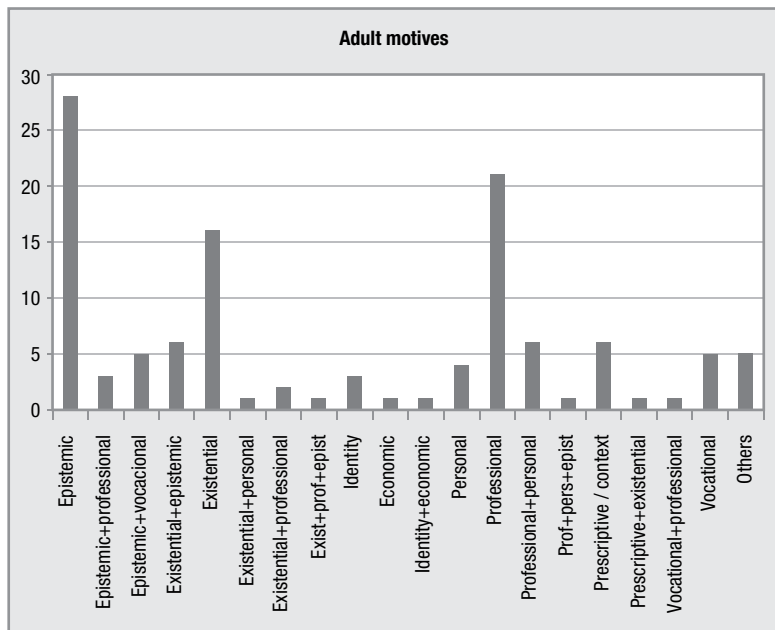
Table 4. Adult motives

Motives	No	%
Epistemic	28	23.93 %
Epistemic + professional	3	2.56 %
Epistemic + vocacional	5	4.27 %
Existential + epistemic	6	5.13 %
Existential	16	13.68 %
Existential + personal	1	0.85 %
Existential + professional	2	1.71 %
Exist + prof + epist	1	0.85 %
Identity	3	2.56 %
Economic	1	0.85 %
Identity + economic	1	0.85 %
Personal	4	3.42 %
Professional	21	17.95 %
Professional + personal	6	5.13 %
Prof + pers + epist	1	0.85 %
Prescriptive / context	6	5.13 %
Prescriptive + existential	1	0.85 %
Vocational + professional	1	0.85 %
Vocational	5	4.27 %
Others	5	4.27 %
Total	117	100 %

Analysis of the data shows that the most significant motive to pursue learning within this group of adults is the epistemic motive. This motive appears in the first place and in a single form for almost 24 % of adults, and in a combined way for almost 13 % of respondents (in the following combination forms: epistemic and professional, epistemic and vocational, epistemic and existential, epistemic and vocational, epistemic professional and personal).

The professional motive is the second single most important motive for this group of adults, for almost 18 % of respondents. And combined professional motives are relevant to almost 12 % of adults (in the following combination forms: professional and existential, professional and personal, professional and vocational, professional epistemic and personal). The following most important single motive is the existential one, for almost 14 % of respondents. And in a combined constellation, it is significant for 4.26 % of adults (in the following combination forms: existential and epistemic, existential and personal, existential and professional, existential and prescriptive, existential professional and epistemic).

Figure 1. **Adult motives**



(a) Motives/gender

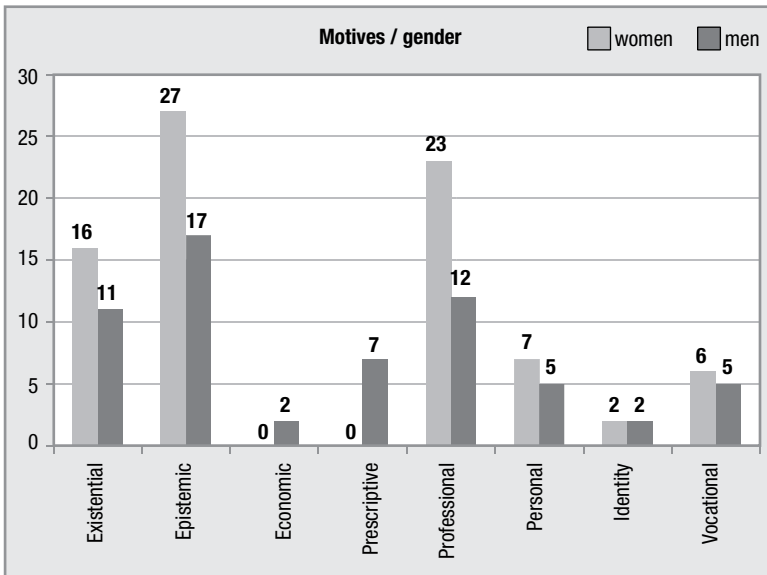
The group of respondents is composed of 52.4 % women and 47.6% men.

Analysis of the influence of gender on motives shows no significant differences between men and women regarding interest in pursuing learning:

- the epistemic motive comes in first place both for women (27 answers) and men (17 answers);
- the professional motive comes in second place both for women (23 answers) and men (12 answers);
- the existential motive comes in third place both for women (16 answers) and men (11 answers).

However, the prescriptive motive and the economic motive were only referred to by male respondents (7 and 2 answers).

Figure 2. **Motives/gender**



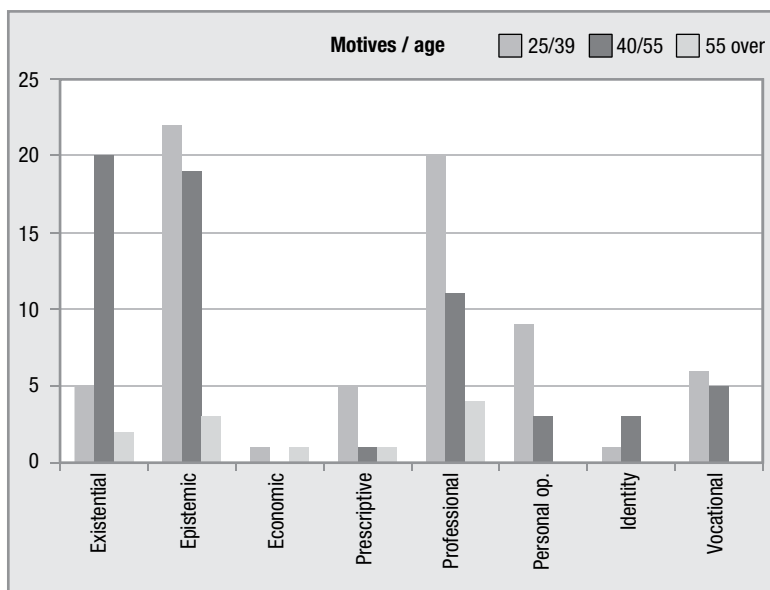
(b) Motives/age

For respondents in the age group of 25/39 years, the most significant reasons for further learning belong to the epistemic motive (22 answers), followed by the professional (20 answers) and personal motives (9 answers). For the age group 40/55 years, the motive in first place is existential (20 answers), followed by the epistemic motive (19 answers) and then the professional motive (11 answers).

For the age group of 55 and over, the professional motive comes in first place (4 answers), followed by the epistemic and the existential motive (both with 3 answers).

According to these data, age seems to have a significant role in the motives for pursuing learning. Younger people (25/39 years old) seem to put the epistemic motive in first place, followed by the professional one, while the group of 40/55 years old seems more to value the existential motive, followed by the epistemic one. However, the group of 55 years old and over seems to value the professional motive above all the others, followed by the epistemic motive.

Figure 3. **Motives/age**

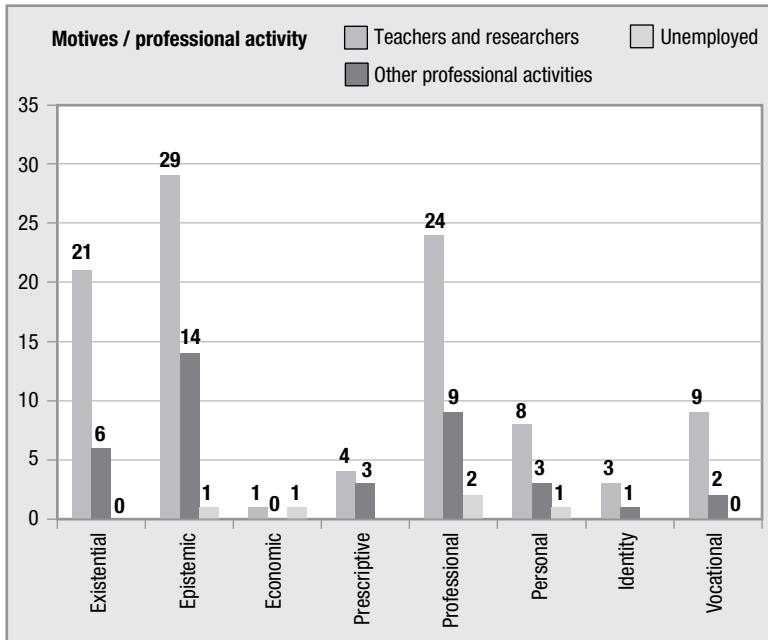


(c) Professional activity/motives

Concerning professional activity, 65 % of respondents are employed, and belong to the group of teachers and researchers, 32 % belong to other professional groups (architects, engineers, mathematicians, chemists, computer scientists, technical public employees, etc.), and 3 % of respondents are not employed.

For the professional group of teachers and researchers, the epistemic motive (29 answers) are in first place, followed by professional motives (24 answers). Existential motives are in third place (21 answers). For the group of respondents that have other professional activities, the most important reasons for learning

Figure 4. **Motives/professional activity**



belong to the same motives as the first group. There seems to be no differences between these two groups.

However, for the group of unemployed people, the professional motive comes in first place, followed by economic, personal and epistemic motives. We think this is consistent with the main need of this group, which is situated in the professional and economic domains (have employment, get economic stability).

Final comments

As we stated in the theoretical framework, motives for pursuing learning can appear in single or combined form, in different 'combination constellations'. Motives are plural, contingent and they are dynamic, they evolve (Carré, 2001). We would like to stress that the epistemic motive is the most valued by this group of adults regarding pursuit of learning, followed by the professional and existential ones. According to the model, the epistemic motive is situated on the intrinsically orientated axis and on the axis oriented to learning content (Carré, 1998, 2001). If we consider that the new group of reasons (that we identified as existential motives) is also intrinsically oriented and oriented to learning content, then there seems to be a very strong group of motives that can be situated in this quadrant of the model.

These types of motivation seem very consistent with a strong engagement towards learning and intention to pursue further learning. This group of adults is strongly committed to demanding learning activities, such as academic post-graduate courses (masters and PhD), that demand time, personal commitment and also a high financial investment – high fees, expensive books and other material resources. Other studies have shown that motivation for learning are stronger in the socio-economic group of highly educated people with a high-level job (Cedefop, 2004, Pont, 2004).

Although there is a difference in the percentage of men and women interested in pursuing learning (women show a higher percentage) the qualitative analysis of data seems to show that gender and professional activity – with the exception of unemployed people – does not seem to have a significant role on motivation for this group of adults.

However, age seems to be a factor that can influence motivation towards future learning. The main motive for younger people seems to be the epistemic one, while for the middle age group the existential motive is more valued.

Concluding remarks

If we consider that learning is a process centred on the individual, driven by a complex combination of motives, linked with projects and expectations, it is important to understand the reasons that can drive adults towards learning.

A deeper look into the motives for pursuing learning in higher education shows that adult motives are plural and related to the specific period of each person's life story (age, employment situation, etc.). Results of this research highlights that there is a strong relation between epistemic motives, higher levels of education and training, and interest in pursuing learning.

According to the Cedefop survey (2004), motivation to take part in education and training tends to be mixed – both work-related and personal reasons. Overall in the EU, the proportions of respondents are equivalent (personal and work-related motives), and only a minority of people undertook education and training solely for one of these motives. It is also underlined in the Cedefop study that this finding contrasts with literature on adult learning, where usually a higher proportion of adult learners are driven by work-related issues.

Regarding the major obstacles and barriers towards learning, post-graduates of the study identified difficulty to reconcile studies and professional activity, lack of time and finance constraints. This shows consistency with the trends identified by Chioussé and Werquin (2005) and other international studies (OCDE, 2003 and 2005) and, it seems, this is a general rule regardless of contexts, systems and cultures.

At the level of institutional barriers, individuals pointed out the lack of available courses related to their needs – particularly nearby. HE institutions should reflect on their strategies to respond to new demands from individuals and from society. Institutions are still trying to find their own role, strategies and practices as providers of multiple and diverse opportunities for adult learning and development.

Lifelong learning cannot be separated from individuals' motivational dynamics (their intentions, expectations, projects and benefits, etc.) but can only be improved if linked to structural and institutional conditions.

Educational institutions, organisations and enterprises have a crucial role in redistributing responsibilities to promote the conditions for wider and successful adult participation in learning and training activities, providing learning opportunities related to their needs and removing existing barriers, such as time and finance constraints.

The diversity of motives and diversity of adult needs, demands, from the educational point of view, an integrated and coherent approach to adult learning policies, as pointed out by Pont (2004, p. 45). For the author, adult learning policies should reflect a 'systemic view of learning', including the 'diversity of demand for and the supply of learning opportunities as part of the whole system'. It should consider broadening the concept of adult learning (as well as non-formal and informal learning), in a broad range of educational strategies. The adult learner should be placed at the centre of the learning process that must be understood as an inclusive process covering multiple objectives and responding to different motives for learning – underpinned by professional, personal or social reasons.

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Technological specialisation courses in Portugal: description and suggested improvements

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SUMMARY

Keywords

Vocational training,
professional education,
technological
specialisation courses
(CETs), quality
evaluation

This study is a part of the ‘Post-secondary Vocational Training in Portugal Project: from a description through to suggestions to improve training quality’, which ran from 2003 to 2006. This article, which makes use of data obtained from interviews with Directors of Schools which offer technological specialisation courses (CETs) and from questionnaires answered by trainers and trainees, describes the courses currently available in the central region of Portugal and identifies the strengths and weaknesses of this type of training. The positive aspects identified are: the type of training; interpersonal relationships, the developments of trainees’ skills and the benefits to the institutions. The aspects requiring improvement are: course organisation (coordination and logistic matters) and some curricular aspects.

Some measures to improve the quality of CETs are suggested, which would assist the creation of courses, strengthen the collective image of this type of training and link training evaluation to training quality.

Introduction

This study is within the scope of the ‘Post-secondary Vocational Training in Portugal Project: from a description through to suggestions to improve training quality’ (1) – the main aim of which was to consider the circumstances of post-secondary vocational training (level IV) (2) in Portugal and particularly the technological specialisation courses (*Cursos de Especialização Tecnológica* – CETs) offered by training institutions in central Portugal, with a view to improving them.

(1) A project funded by the Calouste Gulbenkian Foundation, coordinated by Nilza Costa, which commenced in October 2003 and was concluded in September 2006. This project was conducted at the Laboratory of Quality Assessment in Education (LAQE), which was created in 2003 as part of the University of Aveiro Didactics and Technology in Trainer Training Research Centre. The principal objective of the Laboratory is to carry out research and to intervene in the evaluation of the quality of educational projects. The Laboratory has charge of various research projects, including two on vocational training.

(2) For the definition of training level in Portugal, see the end of the study.

Given both the growing social and educational relevance of vocational training and the recent creation of technological specialisation courses, this study focuses on two key questions: (i) how should CETs be characterised in terms of training areas and the profiles of those involved in them and (ii) what aspects exist, which can improve training quality, particularly in relation to the various players involved in CETs?

In this article, we shall seek a) to characterise CETs in the central region of Portugal, on the basis of the identification of (i) the training components of the courses and their local and regional contexts; (ii) the educational and/or other entities involved in the promotion of the courses; (iii) the profile of the students who attended the courses; and (iv) the trainers involved in the training; and b) to identify the strengths and weaknesses of CETs and make some suggestions regarding the improvement thereof.

This article is accordingly organised in four sections: (i) an introduction, in which the aims and structure of the article are explained; (ii) the relevance of the subject matter, a section which describes technological specialisation courses, why they arose, how they are structured and evolve and the indicators of the relevance of this type of vocational training; (iii) a short description of the empirical study undertaken and a presentation and discussion of the results; and (iv) final observations.

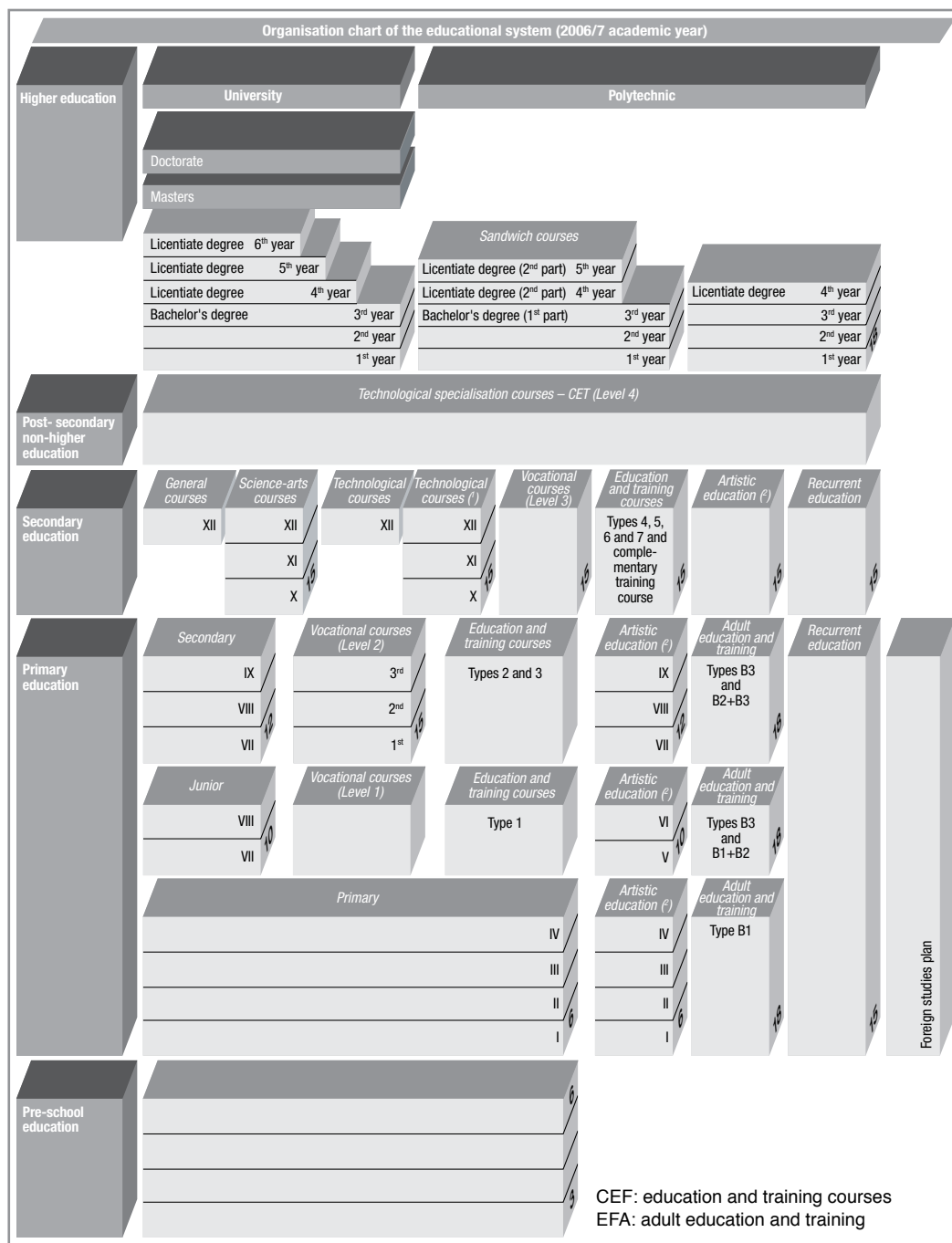
The relevance of the subject matter

Technological specialisation courses (CETs)

Technological specialisation courses (CETs), which were created in Portugal in 1999 ⁽³⁾, became a major training effort for the qualification of adults and young people throughout the country, as they offer non-higher post-secondary education training and seek to offer a training trajectory, which comprises the objectives of qualification and integration in work and also continued education in higher education. These courses offer a level IV vocational qualification and operate under the auspices of various Ministries, (Ministry of Education, Ministry of the Economy, etc.), depending on the subject matter of the course.

⁽³⁾ Statutory Instrument no 989/99 of 3 November, subsequently amended by Statutory Instrument no 392/2002 of 12 April and by Decree-Law no 88/2006, of 23 May.

Figure 1. The Portuguese education and training system during academic years 2002/3 and 2003/4



(¹) Statutory Instrument 550 A/2004, of 21st of May

(²) Specialised Artistic Education – in integrated format

In the organisation chart of the Portuguese educational and training system (cf. Figure 1), CETs are located between secondary education and higher education and are classified as short-term post-secondary (level IV) education and can last for three to four terms, depending on the training area.

Even though CETs are not the fruit of specific legislation, the first indications of the emergence of CETs in Portugal date from 1993, when they were an additional form of training which vocational schools could offer. Imaginário (1995, p.57) states as follows: *although the legality [of CETs] has been negatively affected (...) they have been in existence for some time and there are even trainees who have successfully completed them.* Only in 1999 were CETs created by special legislation.

Why CETs were set up

According to Pereira, Costa and Duarte (2006), two different sorts of demand lie at the origin of CETs. One of them is internal: a response to the need for intermediate training profiles, given the dynamics of regional and local work and employment. The other demand is European, and relates to the need and seeks complementarity of the training obtainable in secondary education (level III courses, for example). The educational systems of various European countries already have long-term secondary level training, which is complemented by short-term specialisations (similar to CETs). For example, in France, according to Imaginário (1995) there is the *bac* (which is equivalent to Portuguese secondary education) + 2 system, which leads to the *Brévet de Technicien Supérieur/BTS* (which is equivalent to the technological or artistic specialisation diploma). There are increasing efforts in Europe to combine long-term secondary education with short-term specialisation in the vocational training of young people, with the aim to ensure that they are accredited with a view to the mutual recognition of qualifications and the movement of workers within Europe.

In Portugal, the aim of the creation of these courses, which were initially associated with vocational schools, was to provide specific training, which is more similar to real working environments ⁽⁴⁾.

Vocational training in Portugal has been criticised by various specialists (Pardal et al.; 2005, Azevedo; 1999 and 2001, Martins; 1999), and by employers (AEP, 2004). In addition to providing students with training that is frequently unrelated to the realities

(4) Decree-Law 70/93 of 10 March – Introduces the legal framework for the creation, organisation and operation of vocational schools, within the scope of vocational education.

imposed by the employment market, it is also characterised by high drop-out levels (Azevedo; 1999);

Vocational education was reintroduced in Portugal in 1983, after almost completely disappearing for a decade and a half (after the abolition of technical education). When it was reintroduced, the misconceptions that viewed it as a secondary option in terms of both school and society remained unaltered (Pardal et al., 2005). After an initial phase of expansion (until the mid-1990s), there was a slight decline after 1996, however this decline 'is not specific to technological education, but is rather a reflection of a structural evolution of general school demography, common to all of secondary education' (Pardal et al., 2005, p.321-322). Following this decline, technical and vocational education entered a period of stagnation and was viewed as a less important educational option, as was also the case in France, where *'education and vocational training were [prior to the creation of the vocational baccalauréat] viewed negatively as an alternative for students, who lacked achievement in general education'* (Gendron, 2005, p.42). If the figures for the 2004/05 school year are considered, it is noted that approximately 70 % of all students matriculated are in general education, while approximately 30 % are in vocational education. According to Pereira (2006), these percentages were viewed by both educational policy makers and employers as imbalanced. Indeed, the AEP (Portuguese Business Association) acknowledges this imbalance and requests political priority during the next ten years (2004-2014) for the improvement of the training of intermediate technical staff.

The secondary education curriculum was reformed in 2004, as a way to combat lack of educational achievement and the drop-out phenomenon and to improve students' performance levels. This curricular reform diversified the range of educational options, via the creation of: (i) science and arts courses, which are intended for those who wish to continue their studies to higher education (these courses replaced the general courses); (ii) technological courses, which seek to facilitate integration in the employment market and continued studies 'particularly via attendance at post-secondary technical specialisation courses and higher education'⁽⁵⁾; (iii) specialised art courses, with the objective of providing training in the various artistic areas and, depending on the artistic area in question, with a view to continuation to higher education or with a

⁽⁵⁾ According to article 5, no 1, paragraph b) of Decree-Law 74/2004.

twin perspective of insertion in the employment market and continued study; and (iv) vocational courses, which provide students with an initial qualification and enable them to continue their studies.

In summary, the vocational training options available to students are as follows: (i) technological courses; (ii) vocational courses; and/or (iii) apprenticeship courses (although technological courses have a more vocational approach). All of these courses lead to a level III qualification. Following this vocational training, students are well prepared for a working life as intermediate level technical staff, or to continue with their studies. If the students choose to continue their studies, they can opt for post-secondary education other than higher education, or for higher education (i.e. university or polytechnic).

Another of the innovations of this curricular reform is the fact that secondary schools are permitted to offer vocational courses. According to Pardal et al. (2005), this is a case of the absorption by general education of the experience gained by vocational schools and specifically with regard to the greater flexibility in the organisation of the curriculum and the adaptation of the curriculum to the locality. According to the said authors, this opening up amounts to a stimulus to increasing the links between general education and business.

How CETs are structured and developed

As is stated above, CETs are short-term post-secondary non-higher courses, with an average duration of 1 400 hours, which include classroom education for one year (scientific, technical and social and cultural training) and are complemented by work experience training (FCT) ⁽⁶⁾ of variable duration in workplaces.

The main objectives of these courses are to: (a) increase the level of scientific and technological knowledge; (b) develop personal and vocational skills, suited to the qualified occupational work; (c) offer training options, which include qualification and occupational placement; and (d) permit the continuation of studies.

⁽⁶⁾ In the new Decree-Law (DL no 88/2006), the designations of the training components have changed (there are now the following components: General and scientific training, technological training and FCT) (chapter III, section I, articles 10- 13) and the value given to the technological training component is increased (preamble). The workload is unchanged and the number of hours of the former components, (i) social and cultural training and (ii) scientific and technological training correspond to the new components (i) general training and (ii) technological training.

Applicants interested in frequenting these courses must have a secondary education. Although previously only students who had frequented level III secondary courses were permitted to take such courses, now ⁽⁷⁾ all secondary students are permitted to take these courses whatever their educational trajectory, subject to the proviso that if the course is not within the student's educational area, the need to obtain additional credits during their attendance at CETs is considered. Students in the final year of secondary education can also apply for a place on these courses, while access was previously limited to students with no more than two subjects pending.

The most recent legislation regarding CETs has sought in a more concerted way to improve course objectives, alter entrance conditions (to make them more flexible) and widen the range of potential course sponsors (higher education institutions are permitted to sponsor courses). When vocational schools, training centres or other entities offer CETs they are required to make a cooperation agreement with a higher education institution. In addition to these changes, individuals who frequent specific CETs may continue their studies in higher education via a special selection procedure. It is necessary for former CET students who wish to go on to higher education to prove that they have had vocational experience in the area of the CET, one year after the completion of the training. Students who have frequented CETs may be granted some credits for higher education subjects.

It should be noted that this legislation is not only accepted in Portugal, but in all Member States of the European Community, as a way in which to establish the equivalence of degrees, diplomas and other training certificates, so that qualification holders can circulate freely within Europe. It should also be noted that the Council of the European Community has defined 5 levels of vocational qualification as guidance to the Member States in the award of vocational training qualifications in Decision No 85/368/EEC ⁽⁸⁾. With a level IV qualification, a certificate holder will be ready to undertake a technical occupation autonomously and/or independently, on the basis of design and/or leadership and/or management responsibilities. This level of training, which is considered to be high level technical training, includes higher level knowledge, capacities and skills.

⁽⁷⁾ According to Decree-Law 88/2006, of 23 May.

⁽⁸⁾ Council Decision of 16 July 1985 on the comparability of vocational training qualifications between the Member States of the European Community (85/368/EEC), published in the *Official Journal of the European Communities* no L 199/56, of 31.07.85.

The current Portuguese context: the role of vocational training

There is a series of indicators which portray the current situation in Portugal in terms of: (i) drop-out rate (primary, secondary and higher education); (ii) young people who lack the necessary qualifications for their first job; and (iii) middle level staff who are insufficiently prepared. So far as the drop-out rate is concerned, according to the European Union, *19.3 % of young people in the 15 Member States of the former European Union left school early* (EU, 2006). In addition to the drop-out rate, the levels of educational underachievement and drop-out have also increased dramatically in secondary education: *schools are very 'inefficient' and only 24 % of students matriculated in technological courses graduate within the planned time period* (Jornal Página da Educação, 2003: p.4) The lack of training of intermediate level human resources is identified by the Portuguese Industrial Association, which states that *despite the attempt to relaunch Technical and Vocational Education (...) it can and must still be stated, in 2004, that the main shortages of intermediate staff have yet to be dealt with* (AEP, 2004).

However, in the light of this situation, we can state that the 'political will' to improve the current scenario and to increase the investment in the qualification of young people exists, as the National Plan for the Implementation of the Lisbon Strategy states that: 'The objective is to make the 12th year the minimum training standard for all young people, by concentrating, in the case of young people, on an increase in vocational education leading to dual certification and, among adults, on the expansion of the range of Education and Training Courses available and on the expansion of the RVCC System⁽⁹⁾ (Recognition, Validation and Certification of Skills)' (Office of the National Coordinator of the Lisbon Strategy, 2006).

Given these challenges of modernisation which Portugal faces, the *Technology Plan* was approved in November 2005 and was conceived as an agenda for change for Portuguese society. This Plan assumes a fundamental role in relation to Growth and Competitiveness in the

⁽⁹⁾ The RVCC procedure makes it possible to increase the level of school qualifications (School RVCC) and vocational qualifications (Vocational RVCC), via the recognition of apprenticeships conducted outside the education system or vocational training. The former (School RVCC) makes it possible to validate and certify the skills acquired by adults throughout their lives, in order to obtain a basic level school (4th, 6th or 9th year) certification or secondary level (12th year) certification. The Vocational RVCC makes it possible to recognise, validate and certify the skills which adults acquire from work and life experience via the award of a Vocational Training Certificate.

National Action Plan for Growth and Employment, which reflects the implementation of the Lisbon Strategy priorities in Portugal. The Technology Plan is an integral part of the Government Programme passed by the Assembly of the Republic. The implementation of the Technology Plan commenced when the 17th Constitutional Government came into power. The targets set by the Technology Plan for the coming years are that the number of young people aged up to 18 who frequent education or vocational training shall increase by 100 % by 2009; that the percentage of people who have completed secondary education (as a % of the 20-24 age group) shall be 65 % by 2010 and that the number of young people frequenting technical and vocational courses shall be 365 000 by 2008 and 650 000 by 2010 (Technology Plan, 2006: <http://www.planotecnologico.pt/pt/planotecnologico/o-que-e-o-plano/lista.aspx>).

The investment in the qualification of young people will involve an increase in the availability of vocational training options in general and of CETs in particular. In the context of this study, vocational training means: *initial training of young people and adults, within the school system, for any qualified occupation, other than at a higher level, and the improvement of human resources* (adapted from Cardim, 1995).

Despite the ongoing measures, however, there are indications from research that all is not well with vocational training (namely level III vocational training), e.g. the small percentage of students who choose this educational pathway (Azevedo, 2001) and the fact that it is a type of education with *markedly functional characteristics, which reproduces the existing social structures* (Martins et al., 2005).

Portuguese and international studies suggest, however, that it is important to invest in the promotion of vocational training quality (e.g., Blom and Meyers, 2003):

- by involving the various partners (those in charge of training institutions, trainers, trainees, families, employers, etc.);
- by taking the various factors into consideration (e.g. contextual factors – the personal characteristics and education of trainees; community, market, work and family influences);
- including various clusters of indicators (e.g. indicators with regard to ‘clients’ expectations; the training process and its results).

The promotion of vocational training quality is accordingly considered to be multifaceted and highly complex and therefore needs to be constantly monitored by the institutions responsible for training (an advisory capacity is a possible approach). Nevertheless, and

given the recent nature of the availability of CETs, little is known regarding this type of training and its quality. Studies of these matters should accordingly be undertaken as a matter of urgency ⁽¹⁰⁾.

Summary description of the empirical study undertaken and presentation of the results

Methodology

A three-stage quantitative and qualitative descriptive study was conducted in order to characterise CET courses and the institutions that offer them in the Central region of Portugal.

The first objective was to identify the educational institutions and/or other entities involved in offering CETs. A documental analysis of the data obtained from official documents was accordingly conducted, which was subsequently checked via direct contact with the schools. The next objective was to characterise CETs (identification of the course training areas and the local and regional context thereof; i.e. partnerships formed and funding). This data was obtained from an interview-based survey of the coordinators of the Institutions which offer courses. The main objectives of the third phase were to develop a profile of those involved in these courses (students and trainers) and to obtain their opinions regarding the main positive and negative aspects of this type of training. To do this, questionnaires were distributed to trainers and trainees when researchers visited the institutions.

Our aim was to observe the subject matter of our study – i.e. CETs – from the point of view of the key players (course directors, trainers and trainees) and on the basis of various sources (documental analysis, interviews, questionnaires, etc.), in order to achieve a broader view via the triangulation of the various results, which are presented below.

⁽¹⁰⁾ In this regard, the doctoral thesis 'Non-Higher Post Secondary Training: The Technological Specialisation Courses in the Aveiro-North Programme of the University of Aveiro – an evaluation study from design to impact' (2006), written by Giselia Pereira, under the supervision of Nilza Costa and co-supervision of Manuel Oliveira Duarte is particularly relevant.

Results

The results presented are broken down into four phases, which include a range of aspects. In the first phase, we identify the educational and/or other entities involved in the promotion of CETs. In the second phase, i.e. the description of the CETs, we include: (i) the training areas covered by the courses; (ii) partnerships; and (iii) funding. In the third phase, we present the profile of those involved in CETs (students and trainers): (i) profile of the students; and (ii) profile of the trainers. In the fourth phase, we describe the evaluation of the Courses made by those involved: (i) students; (ii) trainers; and (iii) coordinators.

First phase: Identification of the educational institutions and/or other entities involved in the promotion of CETs.

Eighteen institutions which offer CETs were identified in the Central region, by consulting the issues of the Government Gazette in which the Ministerial Orders for the creation and implementation of the courses were published and via consultation of the web pages of these Institutions. However, when contacted by telephone and email, only six of these institutions confirmed that they did, in fact, offer this type of course: Tondela Vocational School (VS); Montemor-o-Velho VS; Torredeita VS; Serra da Estrela VS; Sertã VS and Aveiro VS.

Second phase: profile of CETs

- (i) So far as the training areas of the courses and the corresponding number of students is concerned, the following courses were being offered: works management (63 students); development of multimedia products (10 students); management of tourism-related leisure and entertainment activities (29 students); installation and maintenance of computer networks and systems (17 students); and industrial organisation (8 students).
- (ii) The coordinators of the Institutions develop partnerships in order to offer CETs with: companies (in all cases), associations (in the case of three vocational schools), e.g.: Associação de Comerciantes da Região de Viseu, Associação Industrial da Região de Viseu, etc.) and local authorities (two institutions).
- (iii) So far as the funding of CETs is concerned, all training organisations make use of the PRODEP programme (Educational Development Programme for Portugal). All VSs also refer to a clear relationship between the creation of courses and their local and regional

context and state that this type of training meets the demand for skilled professionals in the locality and region where the school is located. Indeed, the coordinators of these institutions referred to contacts not only with companies in the region, in order to identify their employment requirements, but also, in the case of one of the VSs, to contacts with the IEFP (Employment and Vocational Training Institute).

*Third phase: Profile of those involved in CETs
(students and trainers)*

This profile is based on an analysis of data contained in the surveys by questionnaire distributed to 60 trainers and 155 trainees. We obtained replies from 45 trainers and 82 trainees.

- (i) The students' profile shows that most students (63 %) are under 24. 27 % are aged between 25 and 30, while the remainder are over 31. The students are predominantly male and the educational level of most of their parents is primary level. There are only six fathers and three mothers whose school careers extended beyond compulsory schooling. So far as the school careers of the respondents is concerned, we concluded that approximately 67 % of students completed their secondary education in vocational schools, while 33 % did so in general education. Concerning the final marks obtained in secondary education, are concerned, 43 % of students had a mark of 13-14 (on a scale of 1-20), 37 % had a mark of more than 17, and 14 % had a mark of 11-12 and the remainder did not respond. Regarding their current occupational status, most of the students are in employment (approximately 65 %), and, of these, 34 % work in a company/industry in the area of the CET they are taking, while 24 % work in another area, 1 % are self-employed in the area of the CET they are following, while 5 % are self-employed in another area. It should be noted that approximately 17 % of the trainees are not currently working, 15 % have never worked and approximately 2 % did not answer.

So far as the main reason for the decision to take a CET, and the subsequent categorisation of the answers to an open question, 49 % of the students referred to an 'increase in their previous knowledge in the area, by adding to the level III education they already had'; 12 % referred to 'future occupational advancement', 10 % stated that the reason for the decision was the 'practical nature of the course' while another 10 % referred to 'personal

interest', 7 % were looking for an 'occupational area with a manpower shortage' while the remaining students gave residual answers, e.g. regarding access to higher education.

- (ii) Regarding the profile trainers, 55 % of the 45 respondents are males; 36 % are aged between 31 and 51, 33 % are aged between 25 and 30, 27 % are aged between 37 and 42 and the remainder are 43 or older. All trainers have a licentiate degree, 33 % have a masters degree, 19 % are studying for a doctorate; however 33 % stated that they do not have a CAP (Teaching Aptitude Certificate) ⁽¹¹⁾, unlike the other 67 %. Only 16 % of trainers do not have an occupational activity other than their CET work. The remaining trainers work in a company/industry (36 %), as teachers in higher education (24 %), vocational education (7 %) or in general education in a secondary school (7 %), or in a variety of professions (10 %, which is made up of members of local government, psychologists and members of the liberal professions, etc.).

Approximately 67 % of trainers teach scientific/technological modules, 27 % teach social and cultural modules, 2 % teach both areas and the remainder did not respond. When questioned regarding their involvement in the supervision of trainees during the work experience part of the course, most (74 %) stated that they were not involved in this aspect. Most trainers (59 %) feel motivated by the remuneration they receive for teaching the modules.

Fourth phase: Evaluation of CETs by participants

- (i) Trainees identified the following positive aspects of the CETs they are taking: the practical nature of the course (27 %), student-student interpersonal relations (24 %) and student-trainer interpersonal relationships (24 %). The other answers were negligible. The main negative aspects of the training (adopting the same rule) relate to the overall organisation of the course (e.g. with regard to coordination of the course) (21 %) and aspects of the curriculum (e.g. a very full timetable) (21 %), while the other replies relate to various other aspects, but in very small percentages.

⁽¹¹⁾ In educational pathway courses, graduates obtain a vocational qualification for teaching, while graduates of other courses need to hold a CAP, which is obtained by attending vocational aptitude training courses.

Regarding the possibility that CETs will be seen by the general public as 'second rate' courses, 51 % of trainees disagree with this opinion and 6 % either do not know or consider that opinion correct, while the remainder did not reply.

- (ii) When evaluating the modules, trainers consider, on average, that: there is little need to make changes (of workload and/or contents); that the module objectives are met well; that they make many correlations between the objectives of their module and the objectives of the course as a whole; that they sometimes make correlations between the topics/contents of their module and the other modules in the same course; that they are sometimes encouraged by the CET coordination team to interact with other trainers who work on the course and that they frequently use practical examples to illustrate theoretical aspects. Overall and on average, they assess the module they teach positively (level 5 on a scale from one to six).

When trainers refer, in reply to an open question, to the correlations between the objectives of their modules and those of the course in general, they refer above all to a relationship with the final objectives of the course (30 %), followed by the relationship with the objectives of other subjects (11 %) and with the final objectives of the courses and subjects simultaneously (11 %). Approximately 11 % state that they do not know about the other modules and also do not acknowledge the need for an interdisciplinary approach, 4 % of trainers state they do not know about the other modules, and the remainder do not reply.

In order to justify the opinion given regarding the greater or lesser encouragement of interaction with other trainers, by the CET coordination team, 26 % of those questioned state that they have such support, but do not explain how and/or with what frequency, 19 % state that there is a lack of contact with the coordination team, 15 % consider such interaction to be common practice in their school, so that there is no need for encouragement by the management bodies; 11 % refer to the existence of contact with the coordination team, but not on a regular basis, and 4 % consider that the purpose of this interaction is to maximise the use of resources and/or equipment. The remainder did not respond.

In their evaluation of the training institution, trainers consider, on average, that: access to teaching resources is very easy; the

course timetable established by the institution is appropriate; the administrative support available is very good and that the interaction with the Course Manager is very good. Overall, their evaluation of the training institution is therefore very good.

So far as their evaluation of CETs in general is concerned, trainers indicate the following main positive aspects: the value of the module taught as an area of knowledge (38 %) and the value of the module taught in terms of the trainee's vocational development (24 %). The following are the main negative aspects identified: the overall organisation of the Course (e.g. lack of contact with the Course coordination team) (25 %) and logistic aspects (e.g. inadequate premises) (19 %).

- (iii) In response to an interview-based survey, the school coordinators indicated the following main positive aspects, which can be broken down into two major categories: the benefits to the school and the benefits to the trainees, with six benefits in each case. Concerning the benefits for the school, the coordinators stress the opportunities for interaction via the creation of cooperation agreements and partnerships (two cases), the extension of the range of training offered (two cases), the teaching challenge to trainers (one case) and the promotion of the school in the region (one school). They mention the following benefits to trainees: the improvement of skills (three cases), occupational advancement (two cases), and opportunities for entry into higher education (one case) and the opportunity to continue to work while continuing to study (one case).

The main negative aspects indicated by school coordinators regarding this type of training are twofold: in terms of organisation and management (10 cases) and in terms of curricular aspects (six cases). They indicate in relation to organisation and management: (i) pedagogic and administrative management (three); (ii) the trainee age limit for the purposes of financial support (two); (iii) the organisation and general workings of the courses (two); (iv) the exclusivity of PRODEP funding (one); (v) limitations imposed by the course entry requirements (one) and (vi) financial management difficulties, because of the uncoordinated nature of the PRODEP payments (1). They stressed the following with regard to curricular matters: the extensive and intensive workload because of the short duration of the course (four cases) and work experience training, e.g. difficulties in the monitoring and management of worker-students' traineeships (2).

According to the replies given by the Coordinators, we note that most schools claim to have training quality monitoring mechanisms (only one school states that it does not). Of the five schools which assess training, four do so via (i) the analysis of the survey questionnaires filled in by the students (two schools) or by students and trainers (one school); and (ii) the coordination of CETs (two schools), without identifying how or which instruments or data were used.

Final remarks

We can conclude that the six schools, all of which are vocational schools which offer CETs, offer courses in eight different training areas, selected in accordance with the local and regional survey by the schools of the demand for qualified workers as communicated to them by companies and the IEFP, and above all the demand by trainees for continuity of the level III training offered by each of the institutions.

The students who frequent the courses are above all male workers, aged under 25, with a family background which is characterised by the low level of their parents' vocational qualifications. The reason they take CETs is above all because they are seeking specialised training in the area in which they work and/or to conclude level III education, mostly in vocational schools, with marks which are generally good.

Trainers are also mainly male and most of them are aged under 35. Many of them are interested in taking post-graduate courses, despite the fact that not all of them have the necessary teaching qualification to be trainers. As CET trainers, who in most cases have other employment (above all in education and in companies/industry), they appear to be satisfied overall with their work, i.e. in terms of their remuneration. They consider the training institution in which they work and their work in the teaching of their modules to be very good, despite the fact that their replies (and particularly their replies to the open questions) appear to indicate the need for some work in the area of course coordination with regard to the promotion of an interdisciplinary context for modules taught and an increased awareness of the courses as a whole (e.g. final objectives and subjects taught).

The survey of the positive aspects of CETs, based on the replies of the various players involved (trainers, trainees and coordinators of

the institutions concerned), shows that the opinions expressed vary according to the type of respondent, as each of them stresses the positive aspects intrinsic in their own circumstances. Accordingly, the students refer to the type of training given (above all the practical nature thereof) and the interpersonal relationships they establish; trainers value the importance of the module they teach in the vocational development of the trainee; coordinators also stress the latter aspect of the development of students' skills, but also the benefits to the school of the creation of these courses (e.g. the creation of partnerships, the promotion of the school's image and/or the expansion of the training offered).

So far as the more negative aspects are concerned, the opinions of the three groups surveyed are much more uniform, as was also the case in the study conducted by Pereira (2006). This study identifies organisational aspects of the course as requiring improvement, such as coordination (identified by trainers and trainees), and general logistic questions related to operability (identified by the coordinators). All of the players involved in the process also indicate some curricular aspects as weaknesses of CETs, with particular emphasis on the extensive workload of this type of training.

We now present a series of suggestions with a view to the improvement of the training offered by CETs, made on the basis of the literature consulted and on the results of the empirical study.

Increasing the basis for the creation of the courses

A suggestion in order to ensure the creation and opening of courses, given their target public, is that schools which offer this type of training should undertake a detailed analysis of training needs in their regions. Failure by institutions which offer courses to carry out such an analysis could result in the existence of a considerable number of CETs which are never launched (in 12 of the institutions identified) for these reasons, because of a lack of applicants. It will be important to improve communications between schools which offer CETs and the companies and industries in the region, not only to research the courses to be created, but also as a way of increasing the level of interaction between the school and work contexts.

The search for a collective identity for training

The second suggestion we consider to be important in terms of the improvement of CETs is the promotion of strategies by course coordinators, which augment the collective identity of the courses,

to facilitate an improved awareness, on the part of course trainers, of the training provided by the course as a whole, as a way in which to promote more collaboration and interdisciplinary work between fellow trainers. Given the importance of collaborative work in terms of the improvement of the dynamics of the trainer-trainee relationship, we are of the opinion, like previous studies (Pereira, 2006), that the creation of pedagogic committees of which course managers, trainers and student representatives will be members, is an important measure, which should be implemented. The institutionalisation of these collaborative structures will amount to acknowledgement of the importance of an open dialogue between all those involved in CETs, so they can jointly resolve any problems that arise.

Using training evaluation to improve training quality

Other suggestions to improve the quality of the training provided involve the improvement of the procedures to monitor the quality of the training provided, in order to make them more systematic and complete. As seen from this study, the existing mechanisms are not being applied systematically (e.g. they are only implemented at the end of the course) and do not involve all those involved in training, or even all aspects thereof (e.g. they assess only the students' performances). However, the legislation, the regulations of which were introduced in 2006, meets this need, i.e. via the creation of an external evaluation committee, in order to monitor the evolution of courses in training institutions. There is also a need to deepen the awareness of the weaknesses of CETs as identified by the various players. It is therefore necessary to consider the possible implementation of mechanisms that can assist the improvement of course quality, i.e. via support processes based on research data, such as that presented in this study.

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Primeiro *Objectivo do Plano Tecnológico: Preparar Portugal para a Sociedade do Conhecimento*. Available on the Internet: [http://www.planotecnologico.pt/document/ENDS_\(1\[1\].Objectivo\).pdf](http://www.planotecnologico.pt/document/ENDS_(1[1].Objectivo).pdf) [accessed on 27 March 2007].

Legislation

Decree-Law 70/93 of 10 March 1993 – Introduces the legal framework for the creation, organisation and operation of vocational schools, within the scope of vocational education.

Decree-Law 88/2006 of 23 May 2006 – Introduces the regulations governing technological specialisation and non-higher education post-secondary training courses, which confer a level 4 qualification.

Statutory Instrument no 1227/95 of 10 October – The regulations governing technological specialisation courses.

Statutory Instrument no 989/99, of 3 November 1999 – The regulations governing technological specialisation courses (CETs), as amended by Statutory Instrument no. 392/2002, of 12 April.

Statutory Instrument no 392/2002, of 12 April 2002 – The regulations governing special selection procedures for access and ingress to higher education.

The Structure of Training or Vocational Qualification Levels

Council Decision of 16 July 1985 (85/368/EEC), OJEC no L199/565

Appendix

LEVEL 1

Training providing access to this level: compulsory education and professional initiation. This professional initiation is acquired at an educational establishment, in an out-of-school training programme, or in the workplace. The volume of theoretical knowledge and practical capabilities involved is very limited.

This form of training must primarily enable the holder to perform relatively simple work and may be fairly quickly acquired.

LEVEL 2

Training providing access to this level: compulsory education and vocational training (including, in particular, apprenticeships).

This level corresponds to a level where the holder is fully qualified to engage in a specific activity, with the capacity to use the instruments and techniques relating thereto.

This activity involves chiefly the performance of work which may be independent within the limits of the relevant techniques.

LEVEL 3

Training providing access to this level: compulsory education and/or vocational training and additional technical training or technical educational training or other secondary-level training.

This form of training involves a greater level of theoretical knowledge than level 2. Activity involves chiefly technical work which can be performed independently and/or entail executive and coordination duties.

LEVEL 4

Training providing access to this level: secondary training (general or vocational) and post-secondary technical training.

This form of training involves high-level technical training acquired at, or outside, educational establishments. The resultant qualification covers a higher level of knowledge and of capabilities. It does not generally require mastery of the scientific bases of the various areas concerned. Such capabilities and knowledge make it possible in a generally autonomous or in an independent way to assume design and/or management and/or administrative responsibilities.

LEVEL 5

Training providing access to this level: secondary training (general or vocational) and complete higher training.

This form of training generally leads to an autonomously pursued vocational activity - as an employee or as self-employed person - entailing a mastery of the scientific bases of the occupation.

The qualifications required for engaging in a vocational activity may be integrated at these various levels.

Available on the website of the Instituto do Emprego e Formação Profissional, I.P. at: http://portal.iefp.pt/portal/page?_page-id=117,104302&_dad=gov_portal_iefp&_schema=GOV_PORTAL_IEFP&p_calledfrom=1

The Bologna process between structural convergence and institutional diversity

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SUMMARY

Keywords

Bologna process,
bachelor's degree,
master's degree,
European Higher
Education Area (EHEA),
European higher
education institution,
structural convergence,
institutional diversity,
employability, binary
higher education
institutions, university,
college

The merging of the Bologna and the Copenhagen processes into a single European education area appears appropriate, especially as general, vocational, adult and academic education are to be integrated in a future European Qualifications Framework (EQF). This is the backdrop to the following description of the Bologna process, which was originally intended as a European unifying blueprint for the reorganisation of study structures and university degrees but which mutated during its implementation into a surprising array of internationally diverse local reform efforts and outcomes.

Introduction

The Lisbon Strategy can be seen as a turning point in European education policy. The Lisbon Agenda set the (economic) policy scene for the EU in the year 2000 with its aim of making Europe the most competitive and dynamic knowledge-based economic area in the world by 2010. Implementation of this aim is based on the Sorbonne (1998) and Bologna (1999) Declarations and their follow-up conferences – known as the Bologna process – and, in vocational education and training (VET), on the Copenhagen Declaration (2002), Maastricht Communiqué (2004) and Helsinki Communiqué (2006) – known as the Copenhagen process.

The Bologna process, which was initiated by the Bologna Declaration in 1999 and is currently planned to run until 2010, has triggered a tremendously rapid reorganisation of European higher education. The boundaries between universities and colleges⁽¹⁾ in tertiary education, which were previously clearly defined, are becoming increasingly blurred. The harmonisation of university degrees (bachelor's/master's) appears to be leading to the break up of the different categories of higher education institution or the binary categories of higher education institution.

The first part of the paper gives a brief description of the organisation, governance and objectives of the Bologna process from a historical and institutional perspective. The second part shows the introduction of tiered study programmes on the basis of selected examples from a number of countries. The third part describes the implementation status and the first outcomes. Part four discusses the implications of the reform, part five the field of tension between convergence and diversity. In part six, the final part, open questions and lessons for European VET are identified and inferences drawn for a future *alma mater bolognaise*.

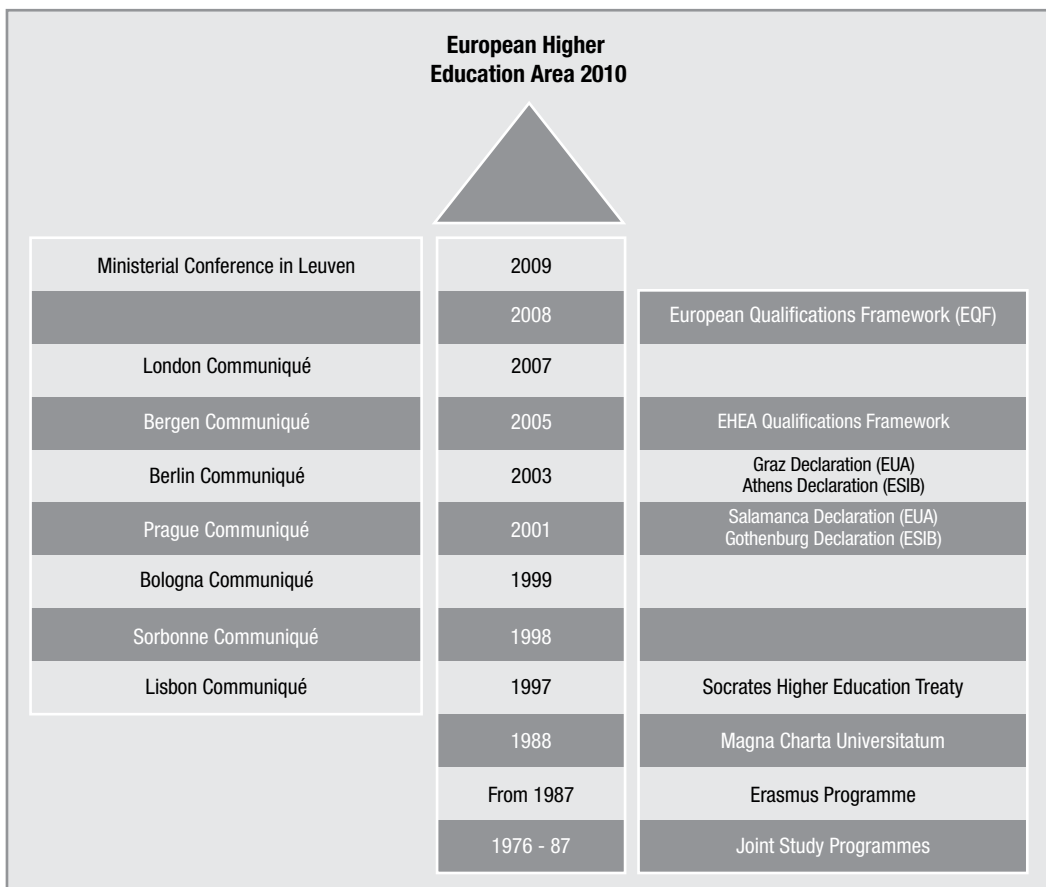
Governance and aims of the Bologna process

The mobility of students and academic staff and the comparability and recognition of their degrees are important prerequisites for better exploitation of the enormous potential of – and in – European

(1) By 'colleges' is meant *hogescholen*, *Fachhochschulen*, etc.; for sake of simplicity it will be used below as a collective term for all non-university higher education institutions.

higher education institutes. Which is why, on the occasion of the 800th anniversary of the University of Paris on 25 May 1998, the four Education Ministers of Germany, France, Italy and the United Kingdom declared their intention, in the so-called Sorbonne Declaration, to remove barriers and create the basis for enhanced European cooperation in the area of higher education. Earlier integration and cooperation initiatives in the area of higher education can be found in the Lisbon Convention on the Recognition of Qualifications concerning Higher Education (1997), the Magna Charta Universitatum (1988), the Erasmus programme (1987) and the joint study programmes (1976-86).

Figure 1. **The stony path to a single European Higher Education Area (EHEA)**



This was taken up in a wider circle in Bologna and made more concrete. The Bologna process is an inter-governmental process representing a non-binding arrangement between the education ministers of, by now, 46 'European' countries. The process of creating a common European Higher Education Area (EHEA) – as shown in Figure 1 – is steered by ministerial conferences that, every two years, take stock of and analyse the progress made and difficulties encountered in meeting the aims and, if necessary, define new priorities (2001 in Prague, 2003 in Berlin, 2005 in Bergen, 2007 in London and 2009 in Leuven/Louvain-la-Neuve).

Between ministerial conferences meetings of interest groups, such as the European University Association (EUA), the European Association of Institutions in Higher Education (EURASHE) and the National Unions of Students in Europe (ESIB), are held to convey their positions. Also included in the process is the European Association for Quality Assurance in Higher Education (ENQA).

The Bologna process is not a genuine and original area of European Union (EU) action, although it is apparent that the EU is increasingly involved. Because the EU has set itself the goal of becoming the globally most attractive area by 2010, the Bologna process is bound to be of interest to the EU. The Bologna process coincides with many EU policy areas: the research-oriented framework programmes and the concept of the European Research Area (ERA) also touch on EHEA-related questions. In joint cross-border study programmes, in particular with third countries, the EU finds certain legitimacy for its involvement, and with its Socrates Mundus programme it has taken the initiative on the structuring of study programmes.

The Council of Europe has a special position because it transcends the Europe of the EU and so its field of action is essentially congruent with the total area covered by the Bologna process. In particular, as a result of the 1997 Lisbon Convention that it initiated, the Council of Europe is, by law, the promoter of the transnational recognition of academic degrees in Europe and is therefore involved for factual and legal reasons.

Policy goals or pan-European instruments are implemented using the open method of coordination (OMC). This is a 'soft' method of governance in supranational matters. It relates to the setting and implementation of common goals. The extent to which goals are attained is assessed by a monitoring system, which creates a positive pressure to provide justification, thereby accelerating national implementation. Other instruments used under the OMC are

benchmarking, a reporting requirement and evaluation. In addition to the official Bologna Follow-Up Group (BFUG) and national committees, i.e. the national Bologna groups, numerous players, such as non-governmental organisations and inter-governmental organisations, participate at European level in shaping the Bologna process, help to achieve the aims of the process and express opinions through messages and declarations. At the same time, ministers are responsible for implementation of the various concepts at national level.

The Bologna process targets can be grouped into three major themes: (1) promotion of mobility, (2) promotion of international competitiveness and (3) promotion of employability. These major themes cover, among other things (Bologna, 1999; Berlin, 2003; Bergen, 2005):

- creation of a system of easily understandable and comparable degrees, including through the introduction of the Diploma Supplement;
- creation of a two-tier system of degrees (consecutive study programmes, undergraduate/graduate);
- introduction of a credit system, the European Credit Transfer System (ECTS), as well as modularisation;
- promotion of mobility by the removal of obstacles to mobility; this not only refers to geographical mobility, but also cultural competences, mobility between higher education institutions and training programmes or lifelong and lifewide learning;
- qualitative development of higher education through faculty development, study programme accreditation and promotion of European cooperation on quality development;
- promotion of the European dimension in higher education;
- lifelong and/or lifewide learning;
- student participation (participation in all decisions and initiatives at all levels);
- promoting the attractiveness of the European Higher Education Area;
- dovetailing the European Higher Education Area (EHEA) with the European Research Area (ERA), in particular by incorporating doctoral studies in the Bologna process.

A further goal is integration of the social dimension; this is regarded as a transversal measure and does not constitute a separate priority.

The London conference of 2007 focused on the issues of mobility, quality assurance and employability. The Ministers for Education

agreed concrete steps to improve the mobility of students, graduates and staff in the 46 Bologna Member States. This includes joint degrees with foreign universities and more flexible curricula for bachelor's degrees.

Over the next two years the priorities will continue to be development of the three-cycle degree structure, quality assurance and the recognition of degrees and study periods. This includes focusing on the employability of graduates. Although the international mobility of students has increased in the past 10 years and has developed from an elite phenomenon into a normal option, mobility rates for European countries show that the overwhelming majority of students complete their studies only in their home country (Kelo, Teichler, Wächter, 2006).

Each Bologna follow-up conference adds a new sub-goal. The following section will use the introduction of tiered degree cycles to show how 'harmoniously' the original objective of a European standardised reorganisation of study programme structures and higher education degrees developed, in the course of implementation, into a surprising array of internationally diverse local reform outcomes.

Between convergence and diversity: the introduction of tiered study cycles and the qualifications framework for the European Higher Education Area

One of the best-known outcomes of the Bologna process is the definition of a system of three consecutive cycles in higher education. These cycles are defined by a framework for higher education degrees (known as the EHEA qualifications framework based on the Dublin descriptors) and ECTS credits (Dunkel, Le Mouillour, 2008a):

- first cycle: typically 180-240 ECTS credits, mainly described as bachelor's degree;
- second cycle: typically 90-120 ECTS credits (minimum 60), mainly described as master's degree;
- third Cycle: Requires independent research. Mainly described as doctorate or PhD. No ECTS credits.

The cycle structure was accompanied by a qualifications framework for higher education degrees to advance the single higher education area. This qualifications framework for higher education degrees,

agreed in Bergen in 2005, is compatible with the emerging EQF, which functions as a meta-framework (for Germany: BMBF, KMK, HRK, 2005). Although this process is out of step with the Bologna process and is driven by different players (European Commission), it promotes a stronger competence and outcome orientation (European Commission, 2006). Thus, the EHEA qualifications framework leads to a common structure that is gaining acceptance in higher education. This general principle behind the introduction of tiered study cycles (BA/MA) is called '3 plus 2'. However, it is doubtful whether this means *e pluribus unum*.

For example, the United Kingdom, Ireland and Malta have always used the tiered system. In Germany, too, the introduction of *Gesamthochschulen* (comprehensive universities) in the 1970s led in some *Länder* to create tiered, consecutive study models awarding a Diploma I (college diploma) and a Diploma II (university degree). The persistence of institutional diversity will be shown below using selected country examples.

The example of German higher education reveals the scope of the changes. Until now, German study programmes have been described primarily in terms of course content, admission criteria and study periods. With qualifications framework, however, the programme can be described on the basis of the qualifications that the graduate will acquire after successfully completing the programme. This reflects the shift from an input-oriented education system to an outcome-oriented one and should improve its transparency. The EQF underscores the paradigm shift envisaged under the Bologna process: more transparent, understandable, and more comparable courses – nationally and internationally – thanks to the clear presentation of the qualification profiles, the definition of entry and exit points and overlaps between education and training courses. Additionally, alternative education paths are made clear by positioning qualifications relative to one other and their development possibilities within the education system.

At first sight, the learning outcome orientation of the EQF appears to be the antithesis of the German VET system, which – in contrast to Anglo-Saxon countries – is highly input- and process-oriented. However, there are a number of evident problems which could possibly be addressed using a learning outcome orientation approach (the undervaluing of German diplomas abroad, the 'transition support system' or *Übergangssystem*, and the lack of bridges between vocation training and higher education) (Dunkel, 2006). Under

the direction of the Federal Ministry of Education and Research and the standing conference of Education Ministers of the *Länder* (*Kultusministerkonferenz*), a German qualifications framework (DQR) is currently being developed which, as a national framework, will cover all educational areas and be compatible with the European level (Hanf, Rein, 2007).

Below we show how structural convergence is constrained not only by study periods, but by further differentiations, for example academic and vocational professional bachelor's programmes, vocational and research-oriented master's programmes and master's with or without a final thesis. Finally, there are also vocational doctorates.

Bachelor's degree – the first cycle

In principle, a BA course should last for three years (180 credits). In practice, however, there is a range of different study periods:

- countries with some leeway: 3-4 years (Germany);
- in some countries three years at universities and four years at other higher education institutions;
- in some countries four years is the norm (Bulgaria, Croatia, Greece, Scotland and Turkey);
- distinction between vocational and academic BA (Finland, the Netherlands and Latvia).

However, since a three-year BA is so concentrated and the curriculum so specialised, it is becoming increasingly impossible to spend a semester at a foreign university without losing time, despite the fact that the Bologna reform is actually supposed to make stays abroad easier.

Master's degree – the second cycle

In principle, there are two types of master's programme in Europe: short post-graduate programmes lasting 1-2 years (60-120 ECTS credits), which follow on from undergraduate programmes of 3-4 years (180-240 ECTS credits) and long, integrated master's programmes of five years (300 ECTS credits) or more in continental European countries.

Generally the MA should last two years (120 credits). In practice, however, here too we find a range of different study periods:

- 1-1.5 years if the BA takes longer than three years;
- in Sweden and the Netherlands, less than five years for both degree cycles;
- in Austria no more than four years (old *Magister* degree).

In the Netherlands, both universities and *hogescholen* offer Academic and Higher Professional Master's degrees, depending on the programme profile. In Italy, the *Laurea* is awarded after three years as the first university degree (180 ECTS), and after another 120 ECTS the *Laurea specialistica* is obtained. In Greece, after four to five years the *Ptychio* or diploma is awarded. After one to two more years of post-graduate studies, a master's-type degree is awarded.

Thus, tiered degree cycles have converged to a much lesser extent than originally expected. In almost every country there are exceptions to the restructuring, which concern mainly the State-regulated professions (law, teaching, medicine). In Germany, the first master's programmes for teachers and the bachelor of medicine have recently been introduced.

There are also consecutive and continuing education programmes ('3 plus 2' or '4 plus 1') as well as research- and application-oriented master's programmes leading either to an M.A. ⁽²⁾ or an M.Sc. ⁽³⁾, while the more practice-oriented programmes lead to an M.Eng ⁽⁴⁾. It is interesting to note in this connection the 'TU 9 initiative', which fears for the good reputation of German technical education and, therefore, rejects any light-weight bachelor's degree. The TU 9 ⁽⁵⁾ is an association of what it itself describes as traditional and successful Institutes of Technology (*Technische Hochschulen*) for quality assurance in the education of engineers. They clearly define and mutually recognise the BA/MA degrees of their engineering graduates with the goal of positioning the university master's degree as the successor to the *Diplomingenieur* ('the bachelor's degree opens all the doors, the master's degree is the goal').

The educational goals and course profiles of colleges and universities in Germany continue to differ considerably. On the one hand, convergence processes are taking place that favour complete

⁽²⁾ M.A: Master of Arts.

⁽³⁾ M.Sc: Master of Science.

⁽⁴⁾ M.Eng: Master of Engineering.

⁽⁵⁾ TU 9: Association of nine German Institutes of Technology for quality assurance in engineering education.

equality for colleges, including the right to confer doctoral degrees; on the other, efforts are being made to confine the courses that can be offered by colleges to BAs.

However, the opposite can also be found: Bulgaria, Denmark, Malta, Poland, Slovakia, the Czech Republic and Hungary do not distinguish between different profiles.

Germany is one of the countries where the formal differentiation between the various master's programmes is particularly elaborate. This tends to be the case precisely in those countries where the higher education system is divided into two (binary system) or more (ternary system) types. The course profile classifications serve primarily to neutralise the broadly overlapping functions of the different types of education institution, which came into being for the introduction of the tiered system of programmes and degrees.

Doctorate – the third cycle

Trends since Berlin 2003 and Bergen 2005 towards a shortening of the time it takes doctoral students to complete their studies and towards preventing them from dropping out include:

- structured doctorate studies integrated into graduate schools, programmes and centres, introduction of taught elements, fast-track BAs; and
- improved quality through joint supervision, evaluations and the creation of a critical mass of professors and researchers as well as ethical codes for research.

The target of a 3 % share ⁽⁶⁾ of GDP for R&D has consequences for the production of knowledge in higher education. In many countries the education of doctoral candidates is regarded as too long, too academic, too narrow and not particularly relevant to non-academic labour markets. The status of doctoral candidate – and hence the social and material situation of doctoral candidates themselves – differs from institution to institution. The status can range from fee-paying student required to take seminars (United Kingdom), to young scientist on a contract enjoying social benefits (Norway). In between there are all sorts of hybrid forms and combinations of various elements. There is also traditional individual supervision by a thesis supervisor.

⁽⁶⁾ R&D: Research and Development.

State of implementation and first visible results

According to the Trends V Report of the European University Association (EUA), 82 % of 908 higher education institutions surveyed in Europe have introduced tiered study programmes. However, only 74 % consider it important to achieve rapid progress in implementing the Bologna reforms. The others appear to be introducing the reform somewhat reluctantly. The lifelong learning objective was considered to be a priority for higher education institutions by only 17 % of respondents. Of the 908 higher education institutions that have implemented ECTS, 75 % referred to their use as a transfer instrument, and 66 % mentioned them as an accumulation instrument (Crosier, Purser, Smidt, 2007). This change in function for credit systems from mere transfer to accumulation, and from an input-orientation (in the sense of workload or learning effort) to a learning outcome-oriented approach, reflects the concept of lifelong learning and the new notion of the learning and working phases in the lives of individuals (Dunkel, Le Mouillour, 2008a).

In addition, there are country-specific particularities of emphasis in the state of implementation of the Bologna reforms that reflect the nationally-oriented interpretation of the common European agenda, for example (BMBF, 2005):

- implementation of a comprehensive quality reform in Norway;
- basic clarification of the relationship between higher education institutions and the State/governance through a Law on higher education in Austria;
- abolition of the binary system by a Law on higher education in Hungary;
- introduction of the BA/MA in Germany by 2009/10;
- positioning within the EHEA, as otherwise possible danger of outsider position within the Bologna mainstream (United Kingdom);
- since 2002 rapid implementation/higher education Law in the Netherlands;
- 2003-09 regional implementation; the LMD (*Licence-Master-Doctorat*) system becomes the new standard in France, whereby three-year bachelor's degrees are based on DEUG (*Diplôme d'Études Universitaires Générales*)/DEUST (*Diplôme d'Études Scientifiques et Techniques*), and two-year master's degrees based on Maîtrise + DESS (*Diplôme d'Enseignement Supérieur Spécialisé*)/DEA (*Diplôme d'Études Approfondies*).

A highly uneven implementation is, in a nutshell, the preliminary assessment of the results of the introduction the BA/MA system:

- the degree of convergence ('harmonisation') is lower than expected;
- no uniform logic behind study periods and types. There is a multitude of models for the duration of study programmes, ranging from 3+1 to 3+2, 4+1 and from 3.5+1.5 to 4+2 years;
- some subjects have been excluded from the tiered system;
- countries have made varying degrees of progress in implementation;
- national reform agendas are integrated under the 'Bologna' label;
- the European qualifications framework and, where applicable, a national qualifications network is being discussed and/or introduced;
- accreditation systems are being developed;
- more competition and vertical mobility is being generated.

The introduction of the BA/MA model is making progress in Germany. Of the bachelor's or *Bakkalaureus* courses on offer, 2 649 are at universities ⁽⁷⁾, 1 836 at *Fachhochschulen* (universities of applied science) ⁽⁸⁾ and 56 at *Kunst- und Musikhochschulen* (colleges of art and music). Master's degree programmes are offered by 1 976 universities, 1 041 *Fachhochschulen* and 48 *Kunst- und Musikhochschulen*. Each of the three types of higher education institution (universities, *Fachhochschulen*, and *Kunst- und Musikhochschulen* – in fewer cases) are increasing the number of their course options within the bachelor's/master's system by 10 % compared with the previous semester.

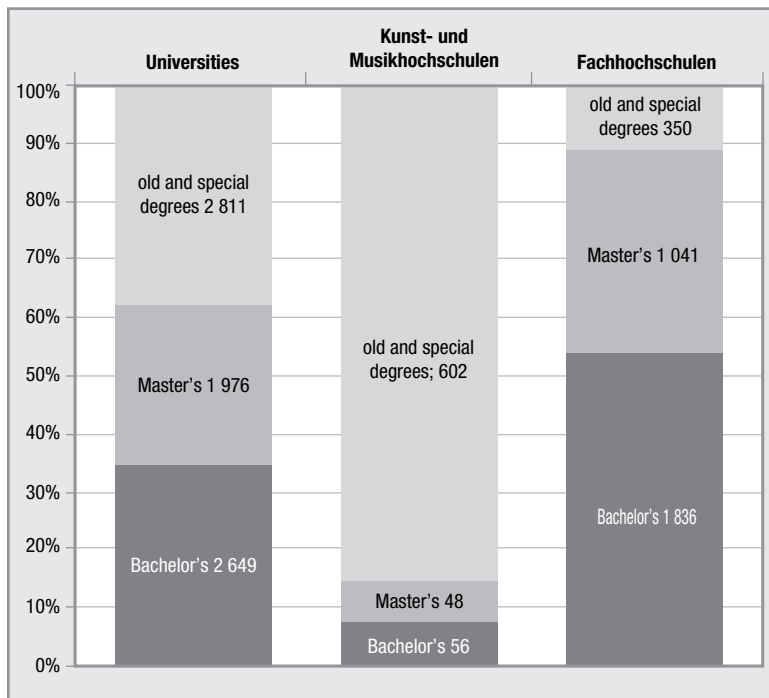
Comparing these figures with the total number of courses offered by universities and *Fachhochschulen*, we can see that – taking bachelor's and master's degrees together – universities already offer 62 % (4 625) of their total courses (7 436) in a tiered course structure ⁽⁹⁾. In the case of *Fachhochschulen*, this share is already as high as 89 % of the total number of total courses on offer (2 877 out of 3 227). The percentage is currently 15 % (104 out of 706) for *Kunst- und Musikhochschulen*, where the reform did not come into effect until later because the structure targets common to all countries included an exception that applied until June 2005.

(7) Universities also include Technical Universities as well as Teacher Training Colleges and Colleges of Theology.

(8) Colleges of Administration have not been included here, as their course options do not appear in official higher education publications.

(9) The total number courses on offer includes basic and advanced courses.

Figure 2. **Courses on offer and degree types for the summer term 2008 in Germany (As at 1.3.2008)**



Source: HRK, 2008.

The Bologna process affects the traditional distribution of roles among higher education institutions. For example, the division of labour in Germany used to be as follows: the universities educated for what is known as the *höherer Dienst* (senior civil service) and *Fachhochschulen* for the *gehobener Dienst* (higher civil service). Members of the *höherer Dienst* include, for example, secondary school teachers, lawyers who have passed their civil service examination and chemists with a university degree. Examples of members of the *gehobener Dienst* are architects, engineers with a degree from a *Fachhochschule*, *Rechtspfleger* (high level court clerks with judicial functions) and *Verwaltungswirte* (graduates in administration). In future, will universities increasingly have to devote a considerable portion of their teaching capacity to meet a demand which, under the binary system, would actually be the task of *Fachhochschulen*? (Stifterverband für die Deutsche Wissenschaft, 2006). Put another way, the reorganisation of degrees now gives universities the opportunity

to position themselves, using BA degrees, in the education market for the *gehobener Dienst*. On the other hand, *Fachhochschulen* can now also offer master's degree courses; however, their graduates are required to undergo a complex recognition procedure before they can be admitted to the *höherer Dienst*. Will there be a 'second-class Bologna', and are the *Fachhochschulen* in danger of becoming the losers of the reform? Or are they exploiting opportunities to position themselves in line with their unique selling point (USP)? In this connection, we need to clarify what function *Fachhochschulen* in Germany – or their equivalents in other Bologna countries – (should) have, including in an EHEA.

By opening the markets of *Fachhochschulen* to universities and the markets of universities to *Fachhochschulen* and by upgrading *Berufsakademien* (Universities of Cooperative Education) as providers for tertiary education, the Bologna process reshapes the higher education landscape. However, competition is constrained by differing requirements: for example, teaching loads of eight hours (university) and 18 hours (*Fachhochschule*), shortage of non-professorial teaching staff, allocation of public funds for research purposes, most recently under the Excellence Initiative.

The introduction of consecutive degrees has led especially to more bureaucracy, but not more mobility for students, who, as part of a short six- or four-semester degree (*Kurzstudium*), have now been fitted into a Taylorised module and credit system that clearly hinders free movement in the European Higher Education Area. Against this background, trying to achieve greater flexibility by changing lecture times is like taking a closed birdcage from the house into the garden and wondering why the caged bird does not fly away.

While personnel managers of large enterprises and employers' associations are giving bachelor's degrees a high-profile welcome (BDA, 2004 and 2006; Bergs, Konegen-Grenier, 2005), for SMEs the situation is somewhat unclear. Uncertainties remain about the job prospects of university bachelor graduates, even among those just starting their studies (HIS, 2007). Clarification is also needed on whether the bachelor's serves as an entry qualification for all highly qualified professions or only for the *gehobener Dienst* and the like, what the *Fachhochschule* bachelor's should look like (Schomburg, Teichler, 2007) and whether it will even come to a 'bachelorisation' of higher vocational education. This is also linked to the issue of permeability (*Durchlässigkeit*) or facilitating access to higher education for those without the qualifications traditionally

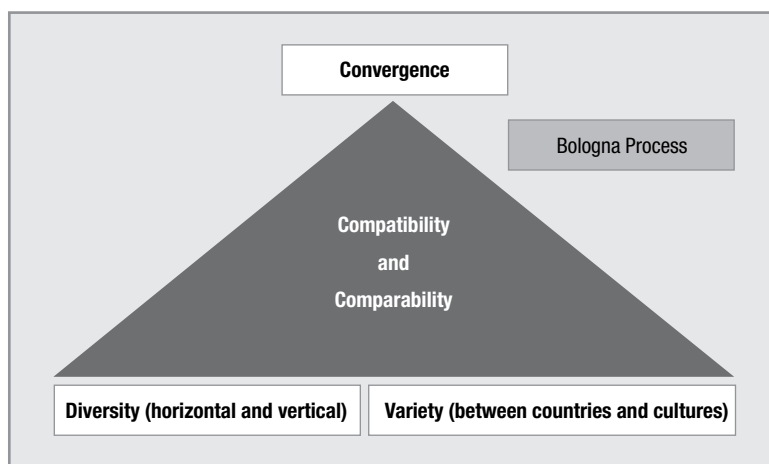
required to enter university or *Fachhochschule*, and settling the rates of transition from the bachelor's to the master's degree (immediately or at a later stage).

Finally, the importance of doctorates (and the right of *Fachhochschulen* to confer doctorates) is growing for activities outside science. This also means closer links between higher education institutions and enterprises with a view to increasing knowledge transfer and positioning higher education institutions within the strategic knowledge triangle of education, innovation and research.

The field of tension

From the line of reasoning followed so far, we can conclude that the compatibility and comparability of degrees are located in a field of tension between convergence and diversity. Diversity encompasses the system, the structure, the programmes, procedures, reputation and constituents as well as the values and climate (Birnbaum, 1983) or the multiplicity of institutional profiles (Bartelse, van Vught, 2007). Diversity is understood as meaning the diversity (horizontal and vertical) within a higher education system, for example the transition from a bachelor's to master's degree, and variety (between countries and cultures).

Figure 3. **The field of tension between convergence and diversity**



The conflicting targets of the Bologna process could lead to a clash between the trend towards a unitary concept on the one hand and national traditions on the other. What is important here is to strike a balance between convergence and diversity so as to facilitate mobility and safeguard the diversity of European traditions.

This field of tension is a sign of the multi-speed Europe, in which – depending on basic position, political creativity and resonance in the higher education systems – the participating countries are positioned differently in relation to the sub-goals and the progress made towards meeting them.

Open questions and the lessons of ‘Bolognaisation’ for European vocational training

Vocational training and higher education have historically taken very different paths. Both have reacted to modernisation demands according to their own logic, and without reference to one another. From the outset, they have both had different educational goals, different concepts and different criteria. Today, two European cities stand for the two systems, but also for their convergence: Copenhagen and Bologna. Matters are not helped by the fact that many find it difficult to stop thinking in terms of conventional structures. And, finally, both systems – vocational training and higher education – are in a phase of radical change.

The task at hand is to create an efficient and permeable education system that satisfies both the ambitions of individuals and the demands of society, in other words a system in which degrees open doors.

If we forecast medium-term employment developments up to the year 2015 and foresee the growing demand for skilled workers and qualifications (Cedefop, 2008), it is very clear that the entire education system needs to be much more permeable and flexible if we are to ensure an adequate supply of highly qualified skilled labour.

Whereas at the beginning of the debate (Lisbon Recognition Convention of 1997) there was mention of diverse European higher education systems, now, given the future EHEA, there is only talk of a qualitatively converging European higher education system. Even with this subtle nuance and increasing uptake in a more flexible way, it remains unclear how far the ‘zones of mutual trust’ extend and to what extent differentiation is kept within limits, i.e.

how much diversity can a system that is supposed to be convergent cope with? (Le Mouillour, Teichler, 2004). In other words, to what extent is convergence of the quality and profile of BA/MA degrees desirable? The higher the level of essential differentiation due to the diversity of students' talents, institutional resources and employment system demands, the more convergence measures can increase actual mobility opportunities. Mobility is improved only to a limited extent by similar or identical degrees, while differentiation by quality and profile increases in other courses and can no longer be bypassed by measures to promote recognition (Kehm, Teichler, 2006). Whereas similar courses of study were regarded as a basis for mobility in higher education, this is not necessarily the case for vocational training. Short degrees are apparently becoming more important, and the type of higher education institution less important. This has consequences for the institutional configuration of the higher education system. Is structural convergence promoted to facilitate recognition in view of quality and profile differences, or should it be an instrument for increasing the convergence of quality and profiles?

In this connection, the change of terminology is interesting. The original 'harmonisation' became 'greater compatibility and comparability' and has now developed into the trend towards 'more uniformity' of the national higher education systems in Europe, a 'structural convergence' in which there is still room for a variety of types of institution.

In terms of the field of tension described above, this development may pointedly be described as a trend towards 'vocational higher education institutions' or 'general vocational training'. The Bologna process promotes such a convergence of structures in three ways:

1. a greater similarity in the formal structure of university and *Fachhochschule* degrees is emerging;
2. a greater overlapping of the functions of the two types of higher education institution can be observed;
3. an increase in the vertical differentiation with regard to quality and reputation is to be expected.

Another lesson of the 'Bolognisation' of education concerns the potential threat to domestic political agendas posed in principle by supranational initiatives. Their invisible hand has an effect on the generally national focus of domestic attempts at solutions. The greater sensitivity to European approaches to certain higher education policy issues can lead to policy imitation. In some circumstance, it

may bring about a possible convergence of sub-policies or simply policy learning in an evolutionary sense (Dunkel, 2005). However, a degree of suspicion in this connection is understandable as it can be assumed that there are a number of more or less hidden agendas behind the stated aims of the Bologna process. Students, for example, fear that the process will be exploited, through the introduction of tuition fees, in such a way that the bachelor's will be free and fees will be charged for all subsequent study phases, and so the process will turn out to be a savings programme with curtailed educational opportunities.

In keeping with the oft mentioned 'enhanced cooperation among education players', the rhetorical element of policy development and implementation should not be underestimated, for example in the case of the national progress reports on the Bologna process, when one signatory State is the first to achieve a certain target of the reforms (e.g. introduction of the Diploma Supplement or development of the qualifications framework for higher education degrees). The Bologna process can be used in this manner to strengthen national positions within the international debate.

Finally, questions remain concerning the relationship between the Bologna and the Copenhagen-Maastricht-Helsinki processes, which have so far been running in parallel, and the possibility of bridges and links in relation to the Lisbon strategy and, therefore, the role of continuing education, which has been treated as somewhat of an orphan so far (Dunkel, Le Mouillour, 2008b).

Conclusions: towards an *alma mater bolognaise*

Most European countries now face the common challenge of providing all future employees with the knowledge and skills they will need in a knowledge-based economy, with its emphasis on flexibility, adaptability and competence. The growing importance of lifelong learning was stressed in both the Bologna and Lisbon processes. These parallel processes were merged for the first time in the 2004 in the Maastricht Communiqué, which explicitly refers to the need to improve permeability within education and training systems and the recognition of qualifications on the basis of learning outcomes were explicitly mentioned, and in the Helsinki Communiqué (2006) with its focus on improving the attractiveness and quality of vocational education and training (CQAF⁽¹⁰⁾, ENQA-

VET), continuing to develop and implement common instruments (ECTS, ECVET, EQF, Europass), mutual learning and the inclusion of all stakeholders. Consequently, universities as places of general education are now increasingly faced with a more vocationally oriented function. At the same time the growth in interdisciplinary knowledge in areas that used to be purely technical has created a demand for more general knowledge.

For higher education institutions, the implications of the Bologna process entail positioning problems on the one hand and market opportunities on the other, as demonstrated by the situation of universities and *Fachhochschulen* in Germany. The reforms implemented so far under the Bologna process are presumably irreversible. In the near future studying will look different from today. The higher education landscape is undergoing radical change, but the participating countries are going for solutions that are not entirely consistent. Implementation of the Bologna reforms represents a cultural and social transformation that has triggered a series of developments and a momentum of its own in those countries. In spite of convergence trends within what is called 'tertiary education', diversity persists in the shape of non-uniform system logic as regards the scope of the introduction and duration of tiered degrees, which means that ultimately there is no way around the effort to try and really understand the higher education systems of our neighbouring countries.

The Bologna process will formally end in 2010, but this will not spell the end of the project. The external dimension of the Bologna process will become increasingly important. In the coming years, the Bologna member states will seek to step up exchanges with non-European countries, some of which are already aligning their higher education systems on the future European Higher Education Area. The growing interest in the European Higher Education Area on other continents as a model for the approximation of national education systems that have evolved from different traditions creates opportunities for the higher education area as an export commodity. The participating States intend to distribute more information on the European Higher Education Area, develop cooperation based on partnership, intensify policy dialogue and facilitate the recognition

⁽¹⁰⁾ In April 2008, the European Commission presented a proposal for a Recommendation of the European Parliament and of the Council on the establishment of a European Quality Assurance Reference Framework for VET (CEC, 2008).

of other degrees. This should further enhance the attractiveness and competitiveness of the European Higher Education Area.

The outlook for the period after 2010 includes access to higher education that depends solely on the abilities of applicants, better exploitation of the potential of the tiered course structure, whether it is in the master's degree or continuing education, and the removal of further obstacles to mobility – for example, pension rights when researchers move to another country. Ultimately, other policy areas will also have to contribute towards the development of the European Higher Education Area.

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Key competences for the development of lifelong learning in the European Union

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SUMMARY

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method of coordination,
schools policy

This paper discusses certain developments in education policy in the European Union since the implementation of the Lisbon strategy. Greater focus on lifelong learning as a means of increasing the competitiveness of the European Union, and establishment of several new, efficient policy tools (above all the 'open method of coordination') have, in a relatively short space of time, opened up national policies in education and training, resulting in 'Europeanisation' of these policies and even the beginning of a process of formation of common European core skills in education and training: a model of 'key competences' that the European citizen should possess to be able to meet the challenges of the increasingly complex environment that surrounds us.

Introduction

In the past few years, in the European policy arena and as part of the process of identifying new ways of making Member States more competitive, education and training have seen very brisk development. This is all the more interesting because of objective obstacles to the Europeanisation of policies. Some areas in which, barely a decade ago, we could scarcely talk of stronger European links (and not at all at transnational level), but which were key to realising adopted objectives, have suddenly found themselves at the centre of several of the most dynamic processes currently under way in the European Union. New opportunities and possibilities have been created in certain areas previously inaccessible to European influence, allowing us to meet a need that has been around for some time for a stronger European dimension in formulating several sectoral policies. Education policies, in particular gradual formulation of common European core skills in lifelong learning, are prominent among them. This paper will throw some light on two aspects of creating and developing the key competences model for lifelong learning.

The paper first defines the context in which, in a relatively short period of time, the first steps have been taken in a potentially very thorough process of formulating common European positions on national education and training policies; or to put it in more concrete terms, a set of reference competences has been formulated that people in Europe should possess in the more competitive environment faced by the European Union; this is primarily reflected in the European framework for qualifications.

The second aspect on which the paper focuses is more important and politically more significant. Creating a model of key competences can also be seen as an innovative approach to formulating 'soft policies' (from the sphere of social policies) developed at the beginning of this decade. This is key for understanding a phenomenon that has arisen in the past few years in areas which, until recently, were very deeply imbued with the principle of subsidiarity. We are referring here to the 'open method of coordination', which is gradually, through a side door as it were, opening up a space for the quiet (and occasionally also concealed) Europeanisation of parts of several national policies and, consequently, for harmonising fairly heterogeneous national systems.

The Lisbon strategy and creation of the key competences model

The starting point for the search for relevant responses to both aspects outlined above was the European Council that took place in Lisbon in 2000. Whenever we speak about the platform for formulating the key competences model, we cannot ignore the Lisbon strategy and the decision taken at that meeting.

The concept of lifelong learning was identified as one of the key instruments for realising the objectives set in Lisbon. The reason for this was simple: the ambition for the European Union to become, in a relatively short time (by 2010) the most competitive, knowledge-based economy in the world, capable of growing both in economic and social terms (therefore with better employability and social cohesion), included, from the very start, acknowledgement that this would not be possible without the most efficient and effective use of its own competitive advantages. The response to the basic question – where might Europe exploit its competitive advantage over, say, North America – was logical. A less expensive workforce, lower environmental standards, the weaker role of the state in ensuring social cohesion, rich natural resources and similar elements could not, in the conditions pertaining in Europe at the turn of the millennium, assuredly, provide a proper basis for formulating cohesive, sustainable strategies. The most natural approach was deemed to be one that emphasised the rich potential of human resources.

Two preconditions had to be met to put the concept of maximising human potential to work in ensuring the growth of European economies. The first was linked to development of a sufficiently effective system of investment in human resources that would also include the need to establish a sufficiently solid and commonly compatible system of education and training. The second related to providing enough work-active and appropriately qualified citizens whose competences would support the objectives outlined in the Lisbon strategy. In their essence, both had two major limitations. Achievement of the first was hindered by education policies being dominated by the principle of subsidiarity. This prevented a sufficiently uniform, harmonised and consequently efficient system of response to the needs of a competitive international environment. The second was marked by a relatively unfavourable demographic picture in European Union Member States, primarily as a result of the ageing

population, which compels States among other things to adapt the older population to changes in the external environment through a continuous system of additional training. The idea was therefore that enforcement of the concept of lifelong learning would allow Europe to close the development gap primarily through the optimal use of human potential.

The dilemma arose of how to confront all these challenges. In policy areas strongly or at least predominantly the domain of nation States, which affect support for the Lisbon objectives, there were insufficient and above all insufficiently effective levers. The measures that generally supported the concept of lifelong learning until Lisbon were restricted to national or regional level. The philosophy of the 'partial approach' did not therefore inspire optimism, because it was clear that global challenges demanded a global approach. It was also clear that answers could no longer be found merely within formal education systems. It was even clearer that the situation demanded common, European core skills. The objectives set could not be achieved as long as there were 15 commonly inconsistent systems.

In Lisbon an attempt was made to find answers to both these dilemmas at the same time. To support the substantive starting points, a method of formulating policy was revived which has, in at least two cases, already yielded good results. A 'magic' connection was made that for now is yielding adequate results.

Development of the key competences model

Adapting European education and training systems to new requirements dictated by an increasingly competitive international environment has, as already noted, become a reality. One of the main components is promoting basic skills to support this process. Gradually, as part of the concept of lifelong learning, a reference framework of competences began to be formulated to identify the key competences that should enable individuals in Europe to be regarded as properly qualified to perform a successful and creative role at the workplace, as part of a professional career and while playing a competent role in society. This is all with the aim of providing effective support for the work of Member States in meeting the objectives set and at the same time creating an appropriate reference framework at European level. There are several important markers here.

As mentioned, one of the conclusions of the European Council in Lisbon was that the European framework must define new basic skills, which would be one of the key measures in Europe's response to globalisation. The European Councils of Stockholm (2001) and Barcelona (2002) endorsed the concrete future objectives of the 'European system' of education and training and the 'Education and training 2010' work programme. These objectives included a range of skills and specific objectives for promoting the learning of foreign languages and developing entrepreneurship, and the overall need to improve the European dimension in education.

The European Commission communication on lifelong learning contains a new emphasis; it identifies 'new basic skills' as a priority and stresses that lifelong learning must cover the period from pre-school education to post-retirement age. The report of the European Council on the broader role of education, adopted in November 2004, stressed that education contributes to preserving and renewing the common cultural background in society, and is particularly important at a time when all Member States are challenged by the question of how to deal with increasing social and cultural diversity. Moreover, enabling people to enter and remain in the world of work is an important part of the role of education in strengthening social cohesion.

In May 2003, the European Council adopted five benchmarks, demonstrating a commitment to measurable improvement in average European performance. These benchmarks – for reading literacy, early school-leaving, the completion of upper secondary education and participation of adults in lifelong learning – are closely linked to the development of key competences.

The joint European Council/European Commission report on the 'Education and training 2010' work programme, adopted in 2004, reinforced the need to ensure that everyone is equipped with the competences they need as part of Member States' lifelong learning strategies. To encourage and ease reform, the report suggests developing common European references and principles, and gives priority to the key competences framework. This recommendation was intended to contribute to developing quality education and training by supporting and supplementing Member States' actions to ensure that their initial education and training systems offer all young people the means to develop key competences to a level that equips them for further learning and adult life. Adults should also be able to develop and update their key competences through consistent and comprehensive products from the lifelong learning project.

Eight key competences have progressively been identified (and put into operation) within this reference framework. These are:

1. communication in the mother tongue;
2. communication in foreign languages;
3. mathematical competences and basic competences in science and technology;
4. ICT competence;
5. learning to learn;
6. social and civic competences;
7. sense of initiative and entrepreneurship;
8. cultural awareness and expression.

For the purposes of our discussion, individual elements of these competences are not important ⁽¹⁾. It is, however, important to realise that the key competences defined constitute a multifunctional package of knowledge, skills and values that all individuals require for their personal fulfilment and development, and for their social inclusion and employment. It is important to know and understand that these competences are conceived as a combination of knowledge, skills

(¹) To illustrate better how thoroughly the core skills that should be possessed by everyone in Europe have been defined, we will define one of them. It is precisely in this 'breadth' of definition that the great importance of the formulation of such commonly comparable competences is to be found. We have chosen the 'learning to learn' competence as it is defined in the proposal for a recommendation of the European Parliament and of the Council on key competences for lifelong learning: 'Where learning is directed towards particular work or career goals, the individual should have knowledge of the competences, knowledge, skills and qualifications required. In all cases, learning to learn requires an individual to know and understand his/her preferred learning strategies, the strengths and weaknesses of his/her skills and qualifications, and to be able to search for the education and training opportunities and guidance and/or support available. Learning to learn skills require first the acquisition of the fundamental basic skills such as literacy, numeracy and ICT skills that are necessary for further learning. Building on these skills, the individual should be able to access, gain, process and assimilate new knowledge and skills. This requires effective management of one's learning, career and work patterns, and, in particular, the ability to persevere with learning, to concentrate for extended periods and to reflect critically on the purposes and aims of learning. Individuals should be able to dedicate time to learning autonomously and with self-discipline, but also to work collaboratively as part of the learning process, draw the benefits from a heterogeneous group, and to share what they have learnt. Individuals should be able to organise their own learning, evaluate their own work, and to seek advice, information and support when appropriate. A positive attitude includes the motivation and confidence to pursue and succeed at learning throughout one's life. A problem-solving attitude supports both the learning process itself and an individual's ability to handle obstacles and change. The desire to apply prior learning and life experiences and the curiosity to look for opportunities to learn and apply learning in a variety of life contexts are essential elements of a positive attitude' (Annex to the proposed recommendation of the European Parliament and of the Council on key competences for lifelong learning – General approach, 2005/0221(COD)).

and attitudes adapted to individual circumstances and with very close common links. Through this approach, the range and understanding of competences from the typical school context (competences acquired through individual subjects or the links between individual subjects) are transferred to the wider societal and cultural context.

At first glance, this 'achievement' looks somewhat banal. However, when one understands the principle that has become the driving force behind this process (creation of common European core skills in education and training), this phenomenon acquires a whole new dimension.

The open method of coordination and development of the key competences model

It was clear from the starting points of Lisbon that the objectives set could only be of assistance to Member States and could in no way become obligatory. There was therefore awareness that the diversity of national priorities was solid and inviolable. The European Union was faced with an extremely difficult task: to define a sufficiently robust method for harmonising national policies at those points crucial for ensuring that the concept of lifelong learning in Europe would have enough vitality.

The decision to revive the open method of coordination was the only logical one ⁽²⁾. This method can be defined as 'a tool that enables mutual comparison and learning, which reduces the risk which is a constituent part of every change and reform' (Goetschy, 2003a, p.14). It both defines the anticipated results or objectives in an individual area; and it is also an instrument for identifying best practices as they are formulated in various European countries. It constitutes a collection of ideas and experiences for formulating appropriate measures for achieving the objectives or results set at national level. The basis for the success of this method is use of indicators and standards.

⁽²⁾ The open method of coordination was formulated in 1993, at the time of the Maastricht treaty, when coordination of a common economic policy (European monetary union) was under way. The second example of use of this method was during preparation of the European employment strategy, which was adopted in 1997 at the European Council meeting in Luxembourg and endorsed in the Amsterdam treaty.

One could say that the open method of coordination comprises four defining elements:

- (a) definition of guidelines, in combination with specific timetables for achieving short, medium and long-term objectives;
- (b) establishment, where possible and appropriate, of quantitative and qualitative indicators, adapted to the needs, opportunities and interests of individual Member States or individual sectors as a means for comparing instances of best practice;
- (c) translation of these European guidelines to national and regional levels by defining specific targets and adopting measures (taking account of national and regional differences);
- (d) periodical monitoring and evaluation (for more, see Lisbon European Council, 23 and 24 March 2000. Presidency conclusions, p. 34).

Basic determinants of the open method of coordination

It is clear from the starting points presented that this method constitutes a new dimension in formulating policies in education and training. However, it does not provide ideal responses to all the dilemmas, for several reasons. Several negative aspects will be presented below.

The method is extremely complex in horizontal and vertical terms, since it includes many players entering the process at different levels. Consequently, quick solutions are out of the question and it is impossible to categorise. Because of this, and because decisions are implemented by nation States, it is fairly unpredictable, which can cause great difficulties when planning policies. Theoretically, it makes rapid qualitative progress impossible. However, numerous experiences show that such progress has nevertheless been made in certain phases ⁽³⁾.

The open method of coordination also gives rise to many methodological issues because clear sanctions cannot be established in monitoring implementation of agreements by supervisory bodies, chiefly the European Commission. It is therefore difficult to establish

⁽³⁾ A good example is the discussion on language competences at the Council of Ministers for Education, where progress has been practically blocked, due to national sensitivity (therefore, unequal starting points as a result of heterogeneous national systems) on the part of several countries with a poorer tradition of foreign language learning (author's note).

a closed circle through which consistent policy cycles might come into being. Some (Syrpis, 2002, p. 7) also characterise the open method of coordination as a 'Trojan horse', enabling an encroachment into the principle of subsidiarity and into policies that are primarily the concern of nation States. It also constitutes a threat to 'communitarian methods', since the possibility of the formulation of 'soft law' threatens established instruments and institutional bases that are part of the primary legislation of the European Union. It can therefore also threaten transnational elements in those areas in which the Union has already asserted them (see Goetschy, 2003a). Nor does this approach have any clear influence over the policies of national governments; it allows Member States merely to 'repackage' in some way the obligations adopted according to the 'Emperor's new clothes' principle, when in reality they have withdrawn from these obligations (see Scharpf, 2003). The possibility of conflict with individual national interests is also a major problem.

However, the open method of coordination also has many positive aspects, and these are of course crucial for confirming the thesis presented in the introduction – that this method provides unimagined potential for development and enables establishment of common European education platforms. It is a type of third way, an alternative to two inadequate approaches, supranationalism and intergovernmentalism. It is also a way of reconciling the fragmented European mosaic of mutually incompatible education systems and the desire to create a superstate. Larson (2002, p. 6) therefore talks of a new 'modus vivendi'.

The method also constitutes a new model that simplifies a search for answers to common questions while taking account of national diversity. It can bind Member States to common objectives without, however, compelling them to harmonise or change their existing policy approaches and institutional bases (see Hemerijck and Berghman, 2004; Rodrigues, 2001). The common definition of several key competences has a positive effect on the attainment of comparable standards in education and training. At the same time, it has the power indirectly to influence national education systems, which can result in redefining specific systemic solutions at national level, even including changes to curricula, without external constraints, merely with internal leverage.

The open method of coordination constitutes a cognitive and normative tool for the defence and construction of a consensus around various practices and paradigms in Europe in those areas with

common objectives and values (see Vandenbroucke, 2002; Ferrera, 2001). It also has potential for experimental learning, since it 'compels' Member States, in a fairly obligatory manner, to exchange information, compare practices, and so on. Some (Zeitlin, 2003a) maintain that the open method of coordination is a means of promoting democratic participation in the EU, since it opens up new opportunities within the range of policy tools, including civil society (non-governmental organisations, social partners, etc.) as well as subnational players (regions). The method forces national governments to include these players in decision-making, which is extremely important for formulating such sensitive policies as education and training.

Perhaps the most important positive characteristic of the open method of policy coordination is that it opens up infinite possibilities for deepening the European dimension in soft policies as well. It will allow us to speak, some time in the future, of a stable and more clearly structured European education sphere – one which is, for now, merely imaginary.

Conclusion

This discussion has established that the Lisbon strategy represents a major turning-point in the process of formulating a European education sphere. It constitutes a substantive change, the start of a new, qualitative cycle in education and training. An intensive and innovative policy process has been initiated. It also represents a high-quality addition to the approaches and tools used in formulating policies which has, in parallel with those which already exist, made inroads in a revolutionary way into fields that were previously the express domain of sovereign national policies.

All the same, there is no room for excessive idealism. It is true that new perspectives are being opened up in the development of a European education sphere. The bases nevertheless remain the same. Discussions at the Council of Ministers for Education demonstrate the reality of the situation. It is primarily the larger countries (Germany) and those with relatively inflexible national education systems (Italy) that most often put the brakes on favourable trends and, owing to their fear of overpenetration of innovative and rapid solutions into their national systems, exert a strong influence over the future development of common core skills in education. The principle of 'one step forward, three steps backward'

is frequently encountered. Progress is nevertheless being made. A parallel principle has been created. Shifts are noticeable. Thanks to the processes that have been outlined in this paper, we can say today that the European Union is entering the realm of education, even primary education, by a side door, which would have been unthinkable a few years ago. This is surely a new dimension in developing a democratic culture in the European Union.

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