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Postal address: PO Box 22427  
551 02 Thessaloniki, GREECE  
Tel. +30 2310490111  
Fax +30 2310490020  
E-mail: [info@cedefop.europa.eu](mailto:info@cedefop.europa.eu)  
Internet:  
[www.cedefop.europa.eu](http://www.cedefop.europa.eu)

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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 *European journal of vocational training* is provided for by Article 3 of the founding Regulation of Cedefop of 10 February 1975.

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.

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Section prepared by **Bettina Brenner** of the Documentation Service of Cedefop with the help of the European network of reference and expertise (ReferNet).

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## Editorial

Dear readers, dear authors,

The role of the *European journal of vocational training* (EJVT) is to disseminate findings of research, policy and practice throughout Europe and beyond. In publishing articles by researchers and specialists, it brings the results of high-quality research, in particular comparative transnational research, to the attention of policy makers, researchers and practitioners in many different countries.

This current issue of the EJVT contains 10 articles, presenting research, policy analyses, or case studies. It covers a varied range of issues crucial to vocational education and training developments such as trainers' beliefs about knowledge and learning, gender differences in apprenticeship, the role of secondary education in promoting equal opportunities, the integration of young people with disability on the job market or social partnerships in accreditation and qualification systems. On the link between employment, training and skills, articles address entrepreneurial thinking, opportunities for skills development in temporary work, career path for middle management in the construction industry and learning for older workers. The discourse of international organisations on education and training systems' development and evaluation is also the subject of an article.

This issue 45 however closes a chapter of the EJVT's history, which used to be published in five languages. From 2009, starting with issue number 46, the EJVT will be published in English only. The streamlining of the Journal's language policy results from developments in European VET policy which have brought new demands on Cedefop. Cedefop has become increasingly involved in supporting the EU, its Member States and social partners in developing new policies and European approaches, tools and principles to modernise European vocational education and training systems and make them the

best in the world. These demands and heavy budgetary constraints that will affect Cedefop starting in 2009 have required the Centre to re-focus its activities and redirect its resources. <sup>(1)</sup>

Despite being published only in English, the EJVT will continue to form a link between research, policy and practice. It will continue to help provide a clearer understanding of developments in vocational education and training. I therefore very much hope you will keep on reading the EJVT and value it as source of information on topical research, policy issues and scientific debate on vocational education and training at European and national levels.

Finally, in closing this editorial, I should also like to thank Éric Fries Guggenheim, Editor in Chief of the EJVT for the past eight years. He will be succeeded by a Cedefop editorial team to continue the EJVT's best tradition of analysis.

**Aviana Bulgarelli**  
*Cedefop Director*

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<sup>(1)</sup> Provisional budget 2009, decision of Cedefop's Governing Board, March 2008.



# Entrepreneurial thinking and action – an educational responsibility for Europe

**Markus Th. Eickhoff**

Kuratorium der Deutschen Wirtschaft für Berufsbildung  
[Vocational training foundation of German trade and industry]

## SUMMARY

**In a general sense, entrepreneurial thinking and action relates to all those in employment, as an attitude to work and working behaviour, and it is accordingly becoming a key factor in competence. For independent entrepreneurs it is also, in a more specific sense, a fundamental precondition for successfully establishing and operating an enterprise. This applies above all to small and medium-sized enterprises, whose contributions to employment, training, gross value added, turnover, innovation, competitiveness and social-policy objectives make them the mainstay of the European economy.**

Entrepreneurial thinking and action is not a single competence – it combines a bundle of (key) abilities, such as initiative, creativity and single-mindedness. The leading organisations of German trade and industry have developed a plan for promoting entrepreneurial thinking and action, which systematically takes account of these abilities in general secondary education; they are then developed during training into an entrepreneurial attitude to work. Specific skills going as far as management and setting up in business are to be offered in continuing education/training and in higher education. Various coordinated measures are required in the individual phases, in order to put in place sustainable entrepreneurship education.

## Keywords

Education policy; enterprise; Europe; lifelong learning; economy policy; Community institutions

## Entrepreneurship as a complex bundle of skills

Studies on the future of work show that future career histories may increasingly reveal switches between employment and self-employment, and periods of continuing training and unemployment (see Plath, 2000, pp. 583 ff., and for further information Paulini-Schlottau, 2004, p. 11). In modern work forms with flat company hierarchies, employees will be acting as entrepreneurs in the enterprise, or 'intrapreneurs'. <sup>(1)</sup> It follows from this that the importance of entrepreneurial thinking and action <sup>(2)</sup> will continue to increase, not only in Germany but across Europe.

Thus the term entrepreneur covers both the original meaning of a person working on his own behalf and the new meaning of a person working on behalf of others, also known as an 'intrapreneur'. In both cases the entrepreneur actively seeks out and identifies market potential, and exploits it for business purposes through innovative productivity based on new combinations of production factors (see Eickhoff, 2006, p. 51). While 'entrepreneur' is used in both senses, in this article entrepreneurship is also used to cover what may be referred to elsewhere as entrepreneurial spirit, entrepreneurial initiative or a culture of self-employment. <sup>(3)</sup>

But what distinguishes an entrepreneur? What characteristics and abilities should an entrepreneur possess? In what work situations does an entrepreneur typically need to act competently? To answer these questions, two fields of work, namely basic research <sup>(4)</sup> [for the pre-establishment and establishment stages <sup>(5)</sup>] and management training (for the post-establishment stage) will be examined in detail. An evaluation of a total of 26 specialist sources resulted in

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<sup>(1)</sup> For use of the term 'intrapreneur(ship)', see Pinchot, 1988, p. 7, Wolff and von Wulffen, 1999, p. 252, and Paulini-Schlottau, 2004, p. 15.

<sup>(2)</sup> In view of the European perspective underlying this article, the word 'entrepreneurship' is used as a synonym for entrepreneurial thinking and action.

<sup>(3)</sup> For the variety of concepts underlying the term 'entrepreneurship', see also Hekman, 2006, pp. 22 f. See also European Commission/DG Enterprise, 2003, pp. 7 and 12; Sternberg, Brixy and Schlafner, 2006, p. 34; and <http://www.desire-project.org> (data accessed on 05.09.2006).

<sup>(4)</sup> The USA and the UK have a lengthy history of entrepreneurship research. In some European countries, particularly those of Central and Eastern Europe, entrepreneurship research is a very new field (see Klandt and Münch, 1990, p. 172).

<sup>(5)</sup> The establishment stage is usually divided into three (essentially temporary) parts, namely the pre-establishment, establishment and post-establishment stages (see, for example, Weihe, 1994, p. 107). Entrepreneurial activity can then be systematised into two (essentially functional) fields of activity, enterprise establishment and enterprise management (see Eickhoff, 2006, pp. 57 f.).



the 102 skills <sup>(6)</sup> listed in the Annex, which are required to establish and manage an enterprise.

The entrepreneurial skills imparted demonstrate that this is a complex bundle of skills, which largely consist of what are known as key skills. <sup>(7)</sup> <sup>(8)</sup> The list can only be indicative in nature (see Eickhoff, 2006, pp. 65 and 67). It lacks deeper meaning because it is not selective, explicit or complete, and cannot be operationalised. In addition, some of the skills, such as representation of the enterprise vis-à-vis the outside world, involve actual tasks, from which skills can only be derived. Thus it must be acknowledged that the criticism that the meaningfulness of lists of tasks of this kind is limited is justified (see Frese, 1987, p. 89). They are too general, and are hence applicable to too many activities and skills. Moreover, it is doubtful whether the empirical basis of such lists is workable.

The wealth of entrepreneurial skills imparted does not serve the aim pursued here. So we shall bundle the core skills.

Core skills can be divided into three areas of content:

1. innovation,
2. enterprise establishment, and
3. enterprise management.

Thus these areas represent summaries of the entrepreneurial skills imparted (see Eickhoff, 2006, pp. 85 ff).

### **1. Core innovation skills**

The entrepreneur must be able to develop innovations and enable them to claim a position on the market. To this end, he must:

- 1.1. ... be able to develop and produce new products and/or product qualities;
- 1.1. ... be able to develop and implement new production processes;
- 1.1. ... be able to develop and introduce new organisational structures;
- 1.1. ... be able to identify and exploit new procurement markets;
- 1.1. ... be able to open up and exploit new sales markets.

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<sup>(7)</sup> The debate on key skills and competences goes back to the 1970s, and is closely associated with the name of Mertens. He understood key skills as being superordinate educational goals, as keys to facilitate access to special knowledge (see Gonon, 2006, p. 427).

<sup>(8)</sup> To date basic research has devoted particular attention to the skills of motivation to perform, readiness to take risks and creativity/innovation (see Schmitt-Rodermund and Silbereisen, 1999, p. 116).

## **2. Core enterprise-establishment skills**

Essentially, this area applies only to self-employed entrepreneurs. However, it also contains some key skills that it is also desirable for employed entrepreneurs to possess.

An entrepreneur must:

- 2.1. ... be able to obtain all the information necessary to establish the enterprise;
- 2.2. ... be able to draw up and implement an establishment plan;
- 2.3. ... be able to negotiate agreements relevant to establishment;
- 2.4. ... be able to undertake formal company registration.

## **3. Core enterprise-management skills**

This area is directed at the post-establishment stage, and again applies equally to self-employed and employed entrepreneurs.

An entrepreneur must:

- 3.1. ... be able to set complex operating targets
- 3.2. ... be able to plan specifically targeted operating processes;
- 3.3. ... be able to take decisions in all areas of operation;
- 3.4. ... be able to support implementation of the decisions;
- 3.5. ... be able to supervise achievement of operating targets, both supporting the process and giving it a final inspection.

## Plan of the leading organisations of German trade and industry

Entrepreneurship education is of particular importance to Germany, since Germany has below-average levels of entrepreneurial spirit and establishment activities (see Sternberg, Brixy and Schlapfner, 2006, p. 12), and it is feared that this will have negative effects on competitiveness, economic growth and employment. On the one hand, those surveyed by the Global Entrepreneurship Monitor (GEM) doubt whether they possess the abilities and experience necessary for entrepreneurial activity. <sup>(9)</sup> On the other, fear of failure is particularly marked in Germany. <sup>(10)</sup> Both points – self-doubt and fear of failure – are decisive reasons for Germany's below-average

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<sup>(9)</sup> See Sternberg, Brixy and Schlapfner, 2006, p. 20. Incidentally, the control survey of experts shows that this self-doubt is not necessarily justified (*ibid.*, p. 21).

<sup>(10)</sup> See Sternberg, Brixy and Schlapfner, 2006, p. 22. Eurobarometer 2004 shows that fear of failure is not a characteristic limited to Germany (see Verwaltungsausschuss des Programms für Unternehmen, 2005, p. 22).

entrepreneurial activity. To address this, the GEM report calls for improvements in establishment skills training and promotion of a social culture of self-employment. <sup>(11)</sup>

In what follows, we shall present a plan by the leading organisations of German trade and industry as represented in the Kuratorium der Deutschen Wirtschaft für Berufsbildung (KWB). <sup>(12)</sup> This plan is currently under discussion in Germany, and can also make a valuable contribution to European initiatives. It has been agreed with all areas of trade and industry and submitted to experts from the worlds of VET practice (including experts from companies operating across Europe or globally), and VET research and policy. The comments received to date on the position paper have been positive.

### Aim of the plan

At the end of October 2006, the European Commission and the Norwegian Government held a conference on entrepreneurship education in Oslo. The key outcome of the conference was the adoption of the Oslo Agenda for Entrepreneurship Education in Europe. <sup>(13)</sup> In the list of objectives and measures, item A4 says:

**'Launch national strategies for entrepreneurship education,** with clear objectives covering all stages of education. Such strategies should call for the active involvement of all relevant actors (public and private), and establish a general framework while defining concrete actions. These will range from the inclusion of entrepreneurship into the national curricula to providing support to schools and teachers. The overall goal will be to ensure that young people can progress coherently in acquiring entrepreneurial competences across all stages of the education system.'

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<sup>(11)</sup> See Sternberg, Brixy and Schlapfner, 2006, pp. 25 f., 31 ff. and 43 f. Promotion of a culture of entrepreneurship is being intensified across Europe (see European Commission/DG Enterprise, 2003, pp. 12 and 25).

<sup>(12)</sup> The KWB is the central coordinating body for German trade and industry, whose general mandate is 'to coordinate employers' interests and to develop and articulate joint positions on vocational education and training on behalf of German trade and industry' (Diedrich-Fuhs, 2006, p. 311). The organisations responsible for the KWB are the Confederation of German Employers' Associations, the Association of German Chambers of Industry and Commerce, *Zentralverband des Deutschen Handwerks* [National association of German craft trades], *Hauptverband des Deutschen Einzelhandels* [National German retail trade association], Federation of German Industries, *Bundesverband des Deutschen Groß- und Außenhandels* [Federation of German wholesalers and exporters], *Bundesverband der Freien Berufe* [Federation of liberal professions] and the German Farmers' Association (ibid.).

<sup>(13)</sup> See [www.ec.europa.eu/enterprise/entrepreneurship/support\\_measures/training\\_education/doc/oslo\\_agenda\\_final.pdf](http://www.ec.europa.eu/enterprise/entrepreneurship/support_measures/training_education/doc/oslo_agenda_final.pdf) (data accessed on 09.07.2007).

The proposed entrepreneurship education plan, which covers all stages of education, <sup>(14)</sup> sets out to demonstrate a way of achieving this goal. The plan is designed as a curriculum, in the sense of the outcome of didactic reflection (see Jongebloed and Twardy, 1983, p. 176). Such reflection covers all didactic issues – target group, intentions (aims), content, methods, and monitoring of teaching/learning outcomes (see Böhm, 2000, p. 118). The aim is to expand previous approaches to entrepreneurship education into a coherent overall plan covering all stages of education. The aims of the individual stages build on one another, so that every stage involves a specific increase in competences in the form of continuous professionalisation. In a spiral curriculum <sup>(15)</sup> of this kind, tried and tested topics, methods and checks on teaching/learning outcomes then need to be geared to the target group and the intentions of the individual stages. This will result in a coherent overall programme.

### **Entrepreneurship education in different stages of education <sup>(16)</sup>**

The starting point is the observation that children and young people should already be integrated into entrepreneurship education. Within the framework of initial and continuing education and training in schools, enterprises, and also institutions of higher education, according to the learner's interests and abilities and the opportunities available in the relevant sectors, schools, institutions of higher education and enterprises, competences <sup>(17)</sup> ultimately extending to independent enterprise management and setting up in business will be acquired in the form of lifelong learning. <sup>(18)</sup>

Under the spiral curriculum, each individual stage of development – from child to adult – is associated with a different objective as regards entrepreneurship. Children and young people (primary and general secondary education) will familiarise themselves with entre-

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<sup>(14)</sup> With regard to the comments that follow, see, in particular, Kuratorium der Deutschen Wirtschaft für Berufsbildung, 2006a.

<sup>(15)</sup> In a spiral curriculum, the structure of the teaching/learning process is geared to the learners' stage of development and maturity. Thus topics will be addressed in early stages of development and then repeatedly taken up and consolidated in subsequent stages (see Bruner, 1970, pp. 61 ff.).

<sup>(16)</sup> See Eickhoff, 2007a.

<sup>(17)</sup> Competences are an individual's relatively stable behavioural options, or dispositions, as opposed to skills, which are the requirements imposed by a job (see Sloane, Twardy and Buschfeld, 2004, p. 108).

<sup>(18)</sup> For the integration of entrepreneurship into the lifelong learning process, see also European Commission/DG Enterprise, 2003, p. 15, and Commission of the European Communities, 2006, p. 5.

preneurship as a positive basic attitude. <sup>(19)</sup> They will obtain a general overview of enterprises' functions and their contributions to society. To this end, young people need to acquire a conscious perception of enterprises and to recognise entrepreneurship as an economic/competition factor, as an opportunity for reintegration of the unemployed and disadvantaged, and as a contribution to social cohesion in less-developed regions (see Commission of the European Communities, 2006, p. 3).

For older young people (vocational training), entrepreneurship is an entrepreneurial attitude to work, which is required of entrepreneurs and will in future be increasingly required of employees (see European Commission/DG Enterprise and Industry, 2005, p. 8). This stage will be known as sensitisation. Such an attitude to work plays a major part in employability, and also opens up, if applicable, new career prospects in self-employment. From these points of view, entrepreneurship education also helps to reduce youth unemployment, which represents a major challenge in parts of Europe at least. <sup>(20)</sup>

Some occupations and sectors offer particularly favourable conditions for establishing/taking over a business as a self-employed person relatively soon after training. This applies, for example, to the retail trade and many service sectors. In occupations like this, an introduction to self-employed activities should be provided actually during training. Young people should try out their entrepreneurial skills in training, for example in planning games or student firms, <sup>(21)</sup> and should then decide whether to seek a career as an entrepreneur or intrapreneur. This decision calls for a degree of maturity as regards entrepreneurship.

In order to be able to establish or take over and/or run an enterprise, many competences are required, as described above. These competences should, above all, be developed in continuing training. Entrepreneurship must already be addressed in continuing training

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<sup>(19)</sup> Entrepreneurship education is a key element of the 2005 European Youth Pact (see Commission of the European Communities, 2006, p. 4).

<sup>(20)</sup> See Rump and Eilers, 2006, p. 83, who see entrepreneurship as an aspect of employability. For youth unemployment in Europe, see Deutscher Industrie- und Handelskammertag, 2006, p. 16.

<sup>(21)</sup> An international group of experts were able to identify 82 student-firm programmes in Europe (see European Commission/DG Enterprise and Industry, 2005, p. 22). This method in particular demonstrates many strengths for sustainable entrepreneurship education (for details, see European Commission/DG Enterprise and Industry, 2005, pp. 23 f.). For more practical examples of methods of promoting entrepreneurial thinking and action in the context of initial vocational training, see Kuratorium der Deutschen Wirtschaft für Berufsbildung, 1984 and Kuratorium der Deutschen Wirtschaft für Berufsbildung, 2006b.

of skilled workers, in order to work towards entrepreneurial working behaviour. In management training and in seminars on setting up in business, the emphasis is on specific (enterprise) management competences and competences for setting up in business (specific approach). This also applies to entrepreneurship events in higher education. Against this background, a simplified transition between vocational and academic education (in the sense of permeability, which was a focal point of the Cedefop Agora in Thessaloniki in February 2007) (see Cedefop, 2007) could provide an additional impetus for entrepreneurship education across all stages of education. To summarise, both continuing VET and higher education are devoting their attention to the actual acquisition of entrepreneurship competences.

Figure 1. **Entrepreneurship as an educational responsibility for Europe** <sup>(22)</sup>

Target group	Objective <sup>(23)</sup>	Entrepreneurship as	Suggestions for implementation
<b>Children</b> (primary/ secondary level)	Familiarisation	Positive basic attitude	Integration of economy into syllabuses Advanced teacher training
	Sensitisation	Entrepreneurial attitude to work	Promotion of key competences integrated with subject content Method-based promotion
<b>Young people</b> (vocational training)	Maturity	Occupation-based introduction to self-employment	Subject-specific supplementation for particular occupations (additional skills training/ optional components)
	Competence	Entrepreneurial working behaviour	Continuing training for skilled workers Training of managers
<b>Adults</b> (continuing education/ training and higher education)	Optimisation	(Enterprise) management competence and competence to set up in business	Seminars on setting up in business Coaching, guidance, workshops, seminars

<sup>(22)</sup> Based on Kuratorium der Deutschen Wirtschaft für Berufsbildung, 2006a, p. 2.

<sup>(23)</sup> Based on systematisation of sensitisation – maturity – competence (see Braukmann, 2003, p. 109). The Consortium for Entrepreneurship Education suggests the graduation Basics, Competency Awareness and Creative Applications (see Consortium for Entrepreneurship Education, 2006, p. 5).

Persons who have been active as entrepreneurs for a long time, and are perhaps even facing an expansion of their entrepreneurial activities, for example by managing another branch or office, have to evaluate their success hitherto and identify and analyse their strengths and weaknesses. This stage should come under the heading of optimisation, in the sense of a continuous improvement process.

## Trade and industry see need for education-policy action

There remains the question of the need for education-policy action and the implementation of sustainable entrepreneurship education across all stages of education. In primary and secondary schools providing a general education, the topic of the economy/trade and industry should be integrated into teaching syllabuses. Furthermore, teachers must be given appropriate skills training. Since it is teachers who convey an initial and, at the same time, lasting impression of enterprises and of trade and industry, they must be specifically prepared for these tasks in their training and advanced training. Periods of work experience in enterprise and regular cooperation with enterprises are particularly helpful (see Commission of the European Communities, 2006, pp. 5 and 12). Thus particular emphasis should be placed on team-teaching concepts, in which teachers and enterprise representatives simultaneously design the teaching. It is also very helpful to teachers if they are provided with curricular recommendations, plans, and topic-based media.

Since many entrepreneurial skills are key skills, which are usually coupled with specialist content, existing regular syllabus content can be used in vocational training. Appropriate competences are imparted by integrating them into the specialist content. For example, it goes without saying that customer orientation is integrated into business and quality assurance into occupations in industrial production. Entrepreneurship education then creates supplementary references to enterprise/competition strategy and promotes the necessary entrepreneurial competences – for example, the ability to empathise with customers and a meticulous approach to the production process. Methods involving more activity on the part of learners themselves – for example, case studies, planning games or projects – are particularly successful in imparting the entrepreneurial competences mentioned.

For occupations with a clear association with entrepreneurship, further provision needs to be created in order to integrate entre-

preneurship into training even more intensively. Suitable measures here are continuing training programmes in parallel with training, known as supplementary skills training, or the creation of appropriate options within training. <sup>(24)</sup>

In the context of vocational training too, teachers and enterprise trainers should be trained in entrepreneurship. For example, methods particularly suited to the topic or current projects should be demonstrated to them. It is precisely in an exchange of experience between practitioners that an important impetus for entrepreneurship education can be identified.

In continuing vocational training and higher education, entrepreneurship can be integrated into existing topics – for example in manager training or lecture series in higher education. However, it can also be a topic *per se* – for example, in seminars on setting up in business. Programmes in continuing training and in institutions of higher education are often supplemented by further guidance and coaching. In this way, entrepreneurs can fall back on individualised external assistance in the specific work situation/with the specific problem.

## Example of implementation: vocational training in the German retail trade

In Germany, basic and vocational training courses are regulated by rules harmonized at federal level. These rules define the content of and examinations for these courses. A typical career in the retail trade begins with training as *Verkäufer* [salesperson] (two-year training course) or *Kaufmann im Einzelhandel* [management assistant in the retail trade] (three years). Optional training courses offer the chance to acquire know-how for more specialised tasks. For example, training courses for *Handelsassistent – Einzelhandel* [commercial assistant] (approx. 400 teaching hours) and *Handelsfachwirt* [commercial specialist] (over 500 teaching hours) qualify students for middle management positions, e.g. as deputy or assistant departmental manager. The training course for *Betriebswirt* [management expert] (over 700 teaching hours) prepares students for the positions

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<sup>(24)</sup> For enterprise acceptance of supplementary skills training programmes and optional training components for entrepreneurship education, see Paulini-Schlottau, 2004, p. 96. Over 50 % of enterprises responding in an empirical study were in favour of supplementary skills training programmes, and around one third were in favour of optional components. Only 11 % of enterprise representatives responding saw a need for compulsory integration into training.



of manager, departmental manager or independent trader. There are also business management courses qualifying students for senior management posts.

The retail trade opens up prospects for independent work at an early stage, which is why companies with branches set their sights on and promote up-and-coming executives while they are undergoing training. As part of the reorganisation of the training course for *Kaufmann im Einzelhandel* in 2004, the qualification 'Fundamental principles of entrepreneurial independence' was added. Additional qualifications can be acquired alongside the normal training without having any impact on the final examination. The retail trade showed at an early stage that this module held little appeal for students, and highlighted the need for conversion to an optional qualification relevant to the final examination (see Kuratorium der Deutschen Wirtschaft für Berufsbildung, 2006a, p. 3). This need was satisfied with an amendment of the training regulations in 2007.

The *Handelsassistent* or commercial assistant is expected to assume specialised, organisational and managerial tasks in an independent and responsible manner and to implement business- and human-resource management instruments. Preparatory courses in, for example, leadership/communication/self-management and human-resource management provide a sound basis for acquiring entrepreneurial skills. The same applies to courses leading to the qualification of *Handelsfachwirt* or commercial specialist. These specialists are expected to assume the tasks of planning, managing, conducting and supervising tasks and situations specific to the retail trade in an independent and responsible manner using business- and human-resource management instruments. Course content relating to entrepreneurship includes business management and personnel management. Aspects of business management include entrepreneurial independence and business plans.

The *Betriebswirt* or management expert is expected to identify solutions to a company's managerial problems in a competent, targeted and responsible manner. This includes strategy formulation and implementation as part of the sustainable management of the company and the management/coordination of the production processes of the company in line with the regulatory framework.

This example of implementation demonstrates that the regulatory framework conditions are sufficient to implement entrepreneurship in accordance with needs. Independent work is a career option at a very early stage in the retail trade, which is why entrepreneurship is offered as an optional subject even in the three-year course to qualify as *Kaufmann im Einzelhandel*. Subsequent training options

include numerous subjects with a direct link to entrepreneurship. This potential should be harnessed in preparatory courses, in other words at microdidactic level. To avoid unwanted duplication between various stages of training, the model set out in Figure 1 (in particular the objectives) should be taken into account.

## Methodological considerations are dominant elsewhere

An international comparison shows no shortage of – methodological – approaches to entrepreneurship education. There is a longer tradition of entrepreneurship education in the UK and the USA than in Central and Eastern Europe. The approaches developed there and in other countries and the experience acquired can provide a valuable impetus for European entrepreneurship education. <sup>(25)</sup> Against this background, we shall present some approaches to entrepreneurship education. Since the range of provision and approaches from regional to (inter)national level is extremely complex, our examination can only serve by way of example.

Entrepreneurship education is widespread in the United States of America (USA). Young, well-trained Americans are currently increasingly striving to achieve entrepreneurial independence (see Bygrave, 2007). The Kauffman Center for Entrepreneurial Leadership Clearinghouse on Entrepreneurship Education (CELCEE) offers a special programme for young people and young adults. In this context, it should be pointed out that the USA currently has some 2 100 special college/university courses in entrepreneurship. In the early 1990s, the figure was still under 400. In these courses, participants are specifically prepared for entrepreneurial activities (with regard to these comments, see Rosenberg, 2006).

The academic institution with the world's longest tradition of entrepreneurship education is Babson College <sup>(26)</sup>, which is still a leader in this field today. Here, the approach involves cross-disciplinary integration of entrepreneurship into teaching, research and practice. Regular conferences are also held for an extended target

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<sup>(25)</sup> The Commission of the European Communities assesses the need for action as being primarily at national and local level (see Commission of the European Communities, 2006, p. 12). For a comprehensive description and comparison of the various education systems in Europe, see [http://www.fit-for-europe.info/webcom/show\\_page.php?wc\\_c=15878&wc\\_id=1](http://www.fit-for-europe.info/webcom/show_page.php?wc_c=15878&wc_id=1) (data accessed on 05.09.2006).

<sup>(26)</sup> See [www3.babson.edu/eship](http://www3.babson.edu/eship) (data accessed on 29.06.2007).

group. The action-oriented curriculum includes, *inter alia*, more than 75 practical case studies of various problems from the fields of enterprise establishment and enterprise management. <sup>(27)</sup> As a rule, colleges and universities in the USA also cooperate with incubation centres within or outside institutions of higher education, business-plan competitions, various consultancy and coaching organisations, business angels and venture capitalists (see Förderkreis Gründungs-Forschung, 2005, p. 135).

In 1987, Steve Mariotti founded the National Foundation for Teaching Entrepreneurship (NFTE) <sup>(28)</sup>. The programme is specifically tailored to young people in low-income regions. Since its establishment, the Foundation has already reached more than 150 000 young people. Furthermore, to date over 4 100 teachers have been trained as multipliers in entrepreneurship education. This approach has become widespread in the USA and in another 13 countries. The individual curricula and teaching materials are aimed at students in high-school, middle-school and post-secondary education.

The focus of entrepreneurship education is also currently on young people in the UK (see Harding, 2007). Within the framework of the International Entrepreneurship Educators Programme of the National Council for Graduate Entrepreneurship (NCGE) [see National Council for Graduate Entrepreneurship (no date)], for example, a target list comprising the following entrepreneurial outcomes has been developed:

1. Entrepreneurial behaviour, attitude and skill development
2. Creating empathy with the entrepreneurial life world
3. Key entrepreneurial values
4. Motivation to Entrepreneurship career
5. Understanding of processes of business entry and tasks
6. Generic Entrepreneurship competencies
7. Key Minimum Business how to's
8. Managing relationships.

Teaching staff can enrol in a 3-day introductory course in this entrepreneurship education programme. The aim is to introduce them to the particular philosophy and the state of the art, among other things.

The South East England Development Agency (SEEDA) [see South East England Development Agency (no date)] of the South East England Higher Education Entrepreneurship Group (heeg) is

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<sup>(27)</sup> For other methods used in higher-education entrepreneurship education, see German Federal Ministry of Education and Research, 2000.

<sup>(28)</sup> See [www.nfte.com](http://www.nfte.com) (data accessed on 29.06.2007).

a model of good practice for regional entrepreneurship education networks. The aim is to structure cooperation between the individual higher education institutions (HEIs) more effectively, to support identification of skills training needs in this area, and to disseminate tried and tested approaches to entrepreneurship research in the region. To this end, the various HEIs offer lectures, workshops and excursions.

In Wales, an approach has been established involving dovetailing of entrepreneurship education in 35 colleges and universities (for this Welsh approach, see Llywodraeth Cynulliad Cymru Welsh Assembly Government, 2003), which serves as a benchmark across national borders. Here, within 18 months, the number of entrepreneurship students increased from a good 3 000 to over 12 000. In addition to colleges and universities, the network also includes incubation centres and spin-offs established in the region.

In addition to the traditional strongholds (particularly the USA and the UK), other countries are also increasingly establishing entrepreneurship education. One of these countries is Israel, whose plans were presented to German experts in June 2007 at the workshop on entrepreneurship as a subject in vocational education and training, held under the auspices of the German-Israeli programme for cooperation in VET. In Israel, entrepreneurship education is being taken up by some schools, from primary schools to vocational schools. It focuses in particular on general and economic viability, for example self-organisation, setting and pursuing goals, and basic economic skills. It is also aimed at promoting the integration of particular target groups – for example immigrants.

Some promising starting points for entrepreneurship education have also recently been developed in Central Europe. In Austria, for example, in 2007 a collection of material for teachers and trainees was published under the heading of *Unternehmergeist in der Lehre* [Spirit of entrepreneurship in teaching] (see Austrian Federal Ministry of Economics and Employment; Wirtschaftskammer Österreich, 2007). This also includes a computer-based enterprise planning game. In addition, entrepreneurship education has been taken up in the experimental *Schumpeter-Handelsakademie* talent-promotion model. Here, the topic is drawn together into an overall educational plan for high-performing young people (see Aff et al., 2006, p. 1). The regular entrepreneurship-based teaching is supplemented by additional components, such as coaching, portfolio files and extracurricular joint ventures (see Aff et al., 2006, p. 8).

Between 2003 and 2006, in the EU pilot project Development of Entrepreneurial Spirit in Europe (DESIRE), <sup>(29)</sup> 18 project partners from ten countries drew up, specifically in the trade sector, five course modules on sensitisation and on the subjects of economics and law, setting up in business in Europe, motor vehicle technology and confectionery technology, with relevant case studies and a plan for advice on setting up a company.

The Junior Achievement <sup>(30)</sup> programme has been in existence since 1919. It is in place in more than 100 countries worldwide, and reaches some 7.5 million students a year. Provision is aimed at students in elementary schools, middle grades and high schools. Various modular thematic building blocks have been developed for each of these target groups. They are based on the specific objectives for the individual stages of learning. In elementary schools, the aim is for students to familiarise themselves with basic economic concepts and to recognise the importance of education for the individual employment options. Students in middle grades and junior high schools familiarise themselves, above all, with the economic benefits of attending higher secondary schools and with the world of work. In high schools, students are provided with information enabling them to make reasoned decisions on their (working) future. At this stage, the aim is also for them to develop further general competences for their working life. The overall programme is based on experimental, action-based learning. <sup>(31)</sup>

Students in Free Enterprise (SIFE) <sup>(32)</sup> is an international programme aimed at students in particular, but also at other target groups. In Australia, for example, a competition to develop innovative products and services was held under the heading of 'Entrepreneur's Challenge'. At the Russian State Pedagogical University in St Petersburg, some 70 students took part in ten workshops on the bases for setting up and running an enterprise. In China, farmers were trained in basic economics (e.g. the association between supply and demand, efficient use of resources), new farming methods, and using the Internet to research information.

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<sup>(29)</sup> For more on this project, see [www.desire-project.org](http://www.desire-project.org) (data accessed on 11.07.2007).

<sup>(30)</sup> For more on Junior Achievement, see [www.ja.org](http://www.ja.org) (data accessed on 03.07.2007) and Junior Achievement (no date).

<sup>(31)</sup> For an overview of Junior Achievement provision for young people aged 13 and upwards, see Hekman, 2006, pp. 211 ff. and 216 f.

<sup>(32)</sup> For more on SIFE, see [www.sife.org](http://www.sife.org) (data accessed on 03.07.2007).

### **Summary of examples of good practice**

In the countries considered here, entrepreneurship education is organised across different stages of education. As a rule, it also incorporates expert practitioners, such as successful entrepreneurs or business angels. This is extremely valuable in terms of creating proximity to practice and integrating practical experience. The institutions concerned – schools and high schools – are often integrated into subject-based networks. The relevant concepts are, however, dominated by methodological components, with similar, usually action-based, methods being employed everywhere – case studies, junior/student enterprises, entrepreneurial success stories, and so on. Other didactic issues, such as goal and content components, are pushed into the background. While the Consortium for Entrepreneurship Education in Columbus, USA, describes the promotion of entrepreneurship competences as a task of lifelong learning, it does assign specific (educational) objectives to individual stages of education, at the same time taking account of practical experience from working life in addition to formalised skills training measures (see Consortium for Entrepreneurship Education, 2006, p. 5). One question remains unanswered, however, namely how the skills training proposals mentioned there are coordinated with one another to form a coherent concept. Since the methods adopted in the relevant approaches to entrepreneurship education are similar to one another, the didactic added value of entrepreneurship education across previous stages of education is unclear. No harmonisation of individual curricula in the sense of a spiral curriculum, with objectives, focal topics and methods building on one another and geared to the relevant target group, is to be seen. Thus while the approaches serve as a basis for the plan of the leading German trade and industry organisations, the plan continues them on the basis of a spiral curriculum in creating the overall concept.

### **Particular importance of entrepreneurship in SMEs**

All enterprises with a workforce of up to 249, an annual turnover of a maximum of EUR 50 million and a balance-sheet total of not more than 43 million euros are categorised, under an EU definition (see European Commission Recommendation, 2003/361/EC), as small and medium-sized enterprises (SMEs). This represents some 23 million European enterprises, equivalent to approximately 99 % of all enterprises. Overall, European SMEs provide around 75

million jobs, or about two thirds of all jobs (see European Commission/DG Enterprise and Industry, 2006). Thanks to their economic performance and innovative achievements, SMEs can be regarded as the backbone or ‘real giants’ of the European economy (European Commission/DG Enterprise and Industry, 2006; see also UNICE, 2006, p. 1).

In recent years, the European Commission has devoted increased attention to supporting SMEs. <sup>(33)</sup> Against this background, the European Charter for Small Enterprises was published in 2000. Its ten lines for action explicitly include entrepreneurship education. <sup>(34)</sup> This point is taken up again and expanded in the Green Paper on Entrepreneurship in Europe. ‘Entrepreneurship policy aims to enhance entrepreneurial vitality by motivating and equipping entrepreneurs with the necessary skills’ (European Commission/DG Enterprise, 2003, p. 12). At the time, the objective was for entrepreneurship education to help to make the EU ‘the most competitive and dynamic knowledge-based economy in the world’ by 2010. <sup>(35)</sup> Even following adaptation of the Lisbon strategy to focus on stronger and sustainable growth and on more and better jobs, entrepreneurship education remains a focal topic of the EU (see Commission of the European Communities, 2006, p. 3).

### Entrepreneurship in SMEs

Owing to the importance of SMEs, entrepreneurship education should be geared to sustainable – in other words durable, operating robustly on the market – enterprises. In principle, this applies to both employed and self-employed entrepreneurs. In the case of entrepreneurial self-employment, it must also be taken into account that SMEs are usually planned and launched in a family context and, in the post-establishment stage, increasingly need to be coordinated with family life. <sup>(36)</sup> This means that they involve particular framework conditions which need to be taken into account in relevant policy lines for action, for example by providing assistance in reconciling family

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<sup>(33)</sup> For a more comprehensive summary of the European initiatives, see Hekman, 2006, pp. 38 ff.

<sup>(34)</sup> In this article, entrepreneurship education is used as a synonym for promotion of entrepreneurial thinking and action.

<sup>(35)</sup> Conclusions of the Presidency, Lisbon European Council, 23 and 24 March 2000.

<sup>(36)</sup> See Piorkowsky, 2002, pp. 2 and 11, also Lang-von Wins et al., 2002, p. 114, who confirm in an empirical study that finding a balance between working and private life is the greatest problem for enterprise founders in the post-establishment phase. Piorkowsky sees family enterprises as ‘hybrid systems in which the two areas that interfere with one another [family household and enterprise; MTE] must be harmonised in order for a sustainable positive trend to ensue’ (ibid. 2002, p. 6).

and self-employed entrepreneurship. As a result of their smaller size, SMEs are also particularly severely affected by administrative requirements and regulations, and are often left out of account by regional initiatives. The fact that the European Commission has acknowledged this aspect is demonstrated by, for example, the European Enterprise Awards, offered for the first time in 2006, which reward particular qualities in the promotion of regional entrepreneurial activities (see Cedefop, 2005).

SMEs depend on well-trained skilled workers <sup>(37)</sup> who, in addition to their specific know-how, also bring with them a particular level of vocational independence <sup>(38)</sup> and a degree of identification with the enterprise. However, empirical investigations have shown that entrepreneurship characteristics of this kind are far from being as pronounced as is desirable (see Rump and Eilers, 2006, p. 90). Thus as long ago as 2004, BUSINESSEUROPE <sup>(39)</sup> – the official representative body for European enterprises – called for expansion of entrepreneurship education measures. Among other things, BUSINESSEUROPE is promoting integration of entrepreneurship into school syllabuses. In its view, if sustainable entrepreneurship education is to be put in place, national ministries of education, the European Commission and enterprises themselves must all play their part (see UNICE, 2004a and UNICE, 2004b).

The proposed plan of German trade and industry takes account of the special situation of SMEs. In its general formulation, it creates scope for employees in SMEs to be trained in entrepreneurship, so that in the flat hierarchies typical of SMEs, they can think and act like entrepreneurs. In its specific formulation, it also makes it possible for know-how to be developed with a view to establishing/taking over an SME.

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<sup>(37)</sup> In Eurobarometer 2005, 16 % of entrepreneurs responding stated that better-trained workers were best for the development of their SMEs (see European Commission/DG Enterprise and Industry, 2006). Fulfilment of the need for skilled workers was the second most important point.

<sup>(38)</sup> For the distinction between self-employment, general vocational independence, entrepreneurial self-employment, simulated self-employment and entrepreneurial thinking and action, see Zedler, 1998, pp. 186 f.

<sup>(39)</sup> The European employers' organisation UNICE has been renamed BUSINESSEUROPE.



## Enterprises promote entrepreneurship

German trade and industry have recognised the far-reaching importance of entrepreneurship, and are actively involved in structuring and implementing it. For example, a KWB survey of trade and industry networks shows that many enterprises promote entrepreneurship in students and trainees.

Thus enterprises combine to form regional networks. They cooperate, for example, with schools of all types and, in this context, offer enterprise information events or workshops. They are also active in various topic-based projects, including Junior, business@school, StartUp, and Go! to school. Here, they incorporate their practical know-how by acting as mentors.

Within the framework of training, they promote their trainees' entrepreneurship competences. Some enterprises have established a *Juniorfirma*. Also common are information events and role play/planning games, in which the subject is taken up. A number of examples from practice were presented in a KWB workshop on entrepreneurship in training (see Kuratorium der Deutschen Wirtschaft für Berufsbildung, 2006b, pp. 22 ff) – Max Bahr GmbH & Co. KG conducts a series of seminars at the start of training, Daimler AG offers its trainees the computer-based planning game TopSim Car, the Joseph-duMont-Berufskolleg in Cologne organises project weeks for prospective booksellers, and ThyssenKrupp Nirosta GmbH has a *Juniorfirma* in the form of a learning island. <sup>(40)</sup> A cooperation project from the retail trade was also presented at the workshop.

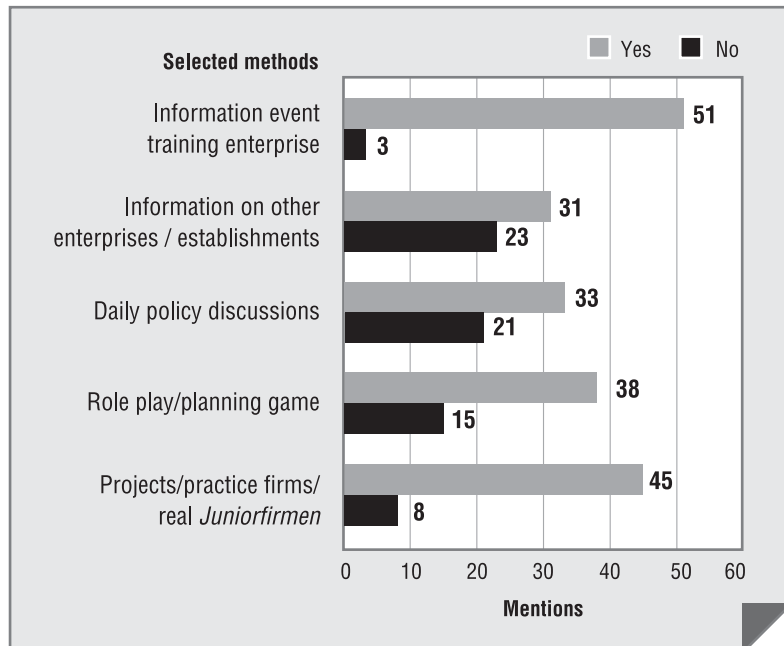
Entrepreneurship competences are also promoted as required in (job-based) continuing training. Examples of this are process organisation and employee management, which are an established component of HR development programmes for the next generation of managers.

Enterprises can also be integrated into entrepreneurship education within the framework of training and continuing training under regulatory policy. As experts from the world of practice, they are involved in drawing up and revising training and advanced training regulations. Here, they advise, *inter alia*, on the extent to which entrepreneurship should be incorporated into the relevant syllabuses.

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<sup>(40)</sup> With reference to the approaches of DaimlerChrysler AG and the Joseph-duMont-Berufskolleg, see also Eickhoff, 2007b.

Figure 2. **Entrepreneurship education in training in enterprise** <sup>(41)</sup>



In higher education, enterprises seek to cooperate with institutions of higher education – particularly with chairs of entrepreneurship education, but also with other chairs. They involve themselves in teaching programmes, offer students work experience, or make it possible for them to learn about enterprises. Some enterprises also support the establishment of sponsored chairs of entrepreneurship education and business-plan competitions.

<sup>(41)</sup> See Kuratorium der Deutschen Wirtschaft für Berufsbildung, 2006b, p. 12.

## Summary from the perspective of German trade and industry

From the perspective of German trade and industry, the following key points arise (see Kuratorium der Deutschen Wirtschaft für Berufsbildung, 2006a):

Entrepreneurship is primarily an entrepreneurial mindset in young employees and entrepreneurial working behaviour in adult employees. It involves many key skills.

Hence entrepreneurship education is above all a question of method. For example, risk-awareness is a personal attitude that can be developed in planning games.

Entrepreneurship education needs to be rooted in regulatory policy in schools offering a general education, and this is also desirable in training and advanced training of teachers in schools and enterprises. In vocational training, it should be linked to existing training content; it is not essential to expand this content in order to develop an entrepreneurial mindset. For occupations with a particular affinity for entrepreneurship, optional choices and supplementary skills training should be created.

Entrepreneurship education must also be stepped up in continuing vocational training and higher education. Here, specific provision should be established for developing (enterprise) management competences and the competences required to set up in business.

The proposed measures for sustainable entrepreneurship education across all stages of education are expected to provide a key impetus for the promotion of entrepreneurship in Europe, and hence for strengthening European SMEs.

## Annex

### Analysis of the literature on entrepreneurial skills <sup>(42)</sup>

Ability to achieve aims	Ability to be creative	Ability to communicate
Ability to motivate	Accessibility and receptiveness to contact	Adaptability
Allocation of resources	Assertiveness	Attraction of customer loyalty
Capacity for analysis	Capacity for critical analysis	Capacity for identification
Capacity for teamwork	Capacity to assess the environment	Conflict management
Conscientiousness	Cooperativeness	Creation of new organisational forms
Creativity	Crisis management	Customer-oriented approach
Decisiveness in uncertain situations	Desire for independence	Desire for power
Desire to create	Desire to dominate	Determination
Development, production and marketing of new products	Disciplined nature	Dynamism
Dynamism and agility	Economical use of limited resources	Efficient working and learning techniques
Employee-oriented management	Enterprise organisation	Ethical and normative judgement
Extroversion	Financing	Flexibility
High level of intelligence	Identification and overcoming of limits on growth	Identification of opportunities
Identification, evaluation and exploitation of change	Identifying and solving problems	Imagination
In touch with reality	Independent thinking and action	Information management
Inner belief in supervision	Integrity	Introduction of new production processes

<sup>(42)</sup> See Eickhoff, 2006, pp. 63 f. and 68.

Knowledge of proprietary rights/trademark law	Leadership ability	Making profitable use of previous experience
Market research and influence	Mobility	Motivation through performance
Negotiating skills	Network management	Observation of the technology market
Ongoing administrative responsibilities	Opening up of new procurement markets	Opening up of new sales markets
Overall view	Persistence	Personal initiative and independence
Persuasiveness	Planning	Predictive thinking and action
Processing of enquiries	Project management	Readiness to take action
Receptiveness	Reflectiveness	Reliability
Representation of the enterprise externally	Representation of the enterprise to those within and outside it	Resilience
Risk-awareness and willingness to take risks	Sectoral knowledge	Self-confidence and self-reliance
Sense of responsibility	Sensitivity and wish to empathise	Setting and, if necessary, correcting targets
Single-mindedness	Spontaneity	Stress resistance
Supervision	Systemic thinking	Talent for communication
Talent for organisation	Tenacity	The courage to make changes
Time management	Tolerance of ambiguity/ambivalence	Tolerance of frustration
Victory mindset	Willingness to experiment	Willingness to innovate
Willingness to perform	Willingness to take decisions	Winning through in competition

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# Social partnership in accrediting Lithuanian VET qualifications

Dr **Vidmantas Tūtlys**, PhD

Centre for Vocational Education and Training, Vytautas Magnus University, Kaunas, Lithuania

**Lina Kaminskienė**

Head of International Relations Department, Deputy Director of Kaunas Chamber of Commerce, Industry and Crafts. A doctoral student in Vytautas Magnus University

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Social partnership,  
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## SUMMARY

**This article examines social partnership in accrediting qualifications in Lithuania. It defines the factors influencing social partnership and surveys future development perspectives, referring to the creation and implementation of the national qualifications system in Lithuania. Social partnership in qualifications accreditation is regarded as a complex phenomenon consisting of the normative level (laws and legal regulations) and the process level (experiences and the existing models of cooperation). The situation in Lithuania is compared with that of other countries looking to apply western European experience in developing a model of social partnership in vocational education and training.**

Accreditation of qualifications today influences not only education but also human resources development. Economic and social development, as well as increasing competition in national and international labour markets, make accrediting qualifications of increasing interest across society. Challenges to vocational education and training require integrated solutions to complex problems. Lithuania is in transition to a new model of socioeconomic development. Accreditation of qualifications no longer concerns purely vocational education and training (further VET) but becomes of joint interest to social partnership and the responsibilities shared by VET institutions and employers' organisations.

This article examines the development of social partnership in accrediting vocational qualifications and analyses the prospects of this partnership in relation to developing the national qualifications system in Lithuania. The main objectives of this article are to:

- (a) analyse the background to the development of social partnership in the Lithuanian VET;
- (b) survey the main problems of social partnership in accrediting and recognising qualifications in Lithuania;
- (c) analyse the experience of social partnership in the vocational education and training of western European countries looking for transferable experience;
- (d) define the perspective model of social partnership for accrediting qualifications in Lithuania.

## PART I.

### Background to the development of social partnership in Lithuanian VET

Today's Lithuanian VET system is based on the five-level qualifications framework. Initial vocational qualification can be acquired at vocational, advanced VET schools, and colleges. To create the most favourable conditions to acquire a vocation, training programmes are offered at several levels within the system. Vocational schools have a four-stage tuition system:

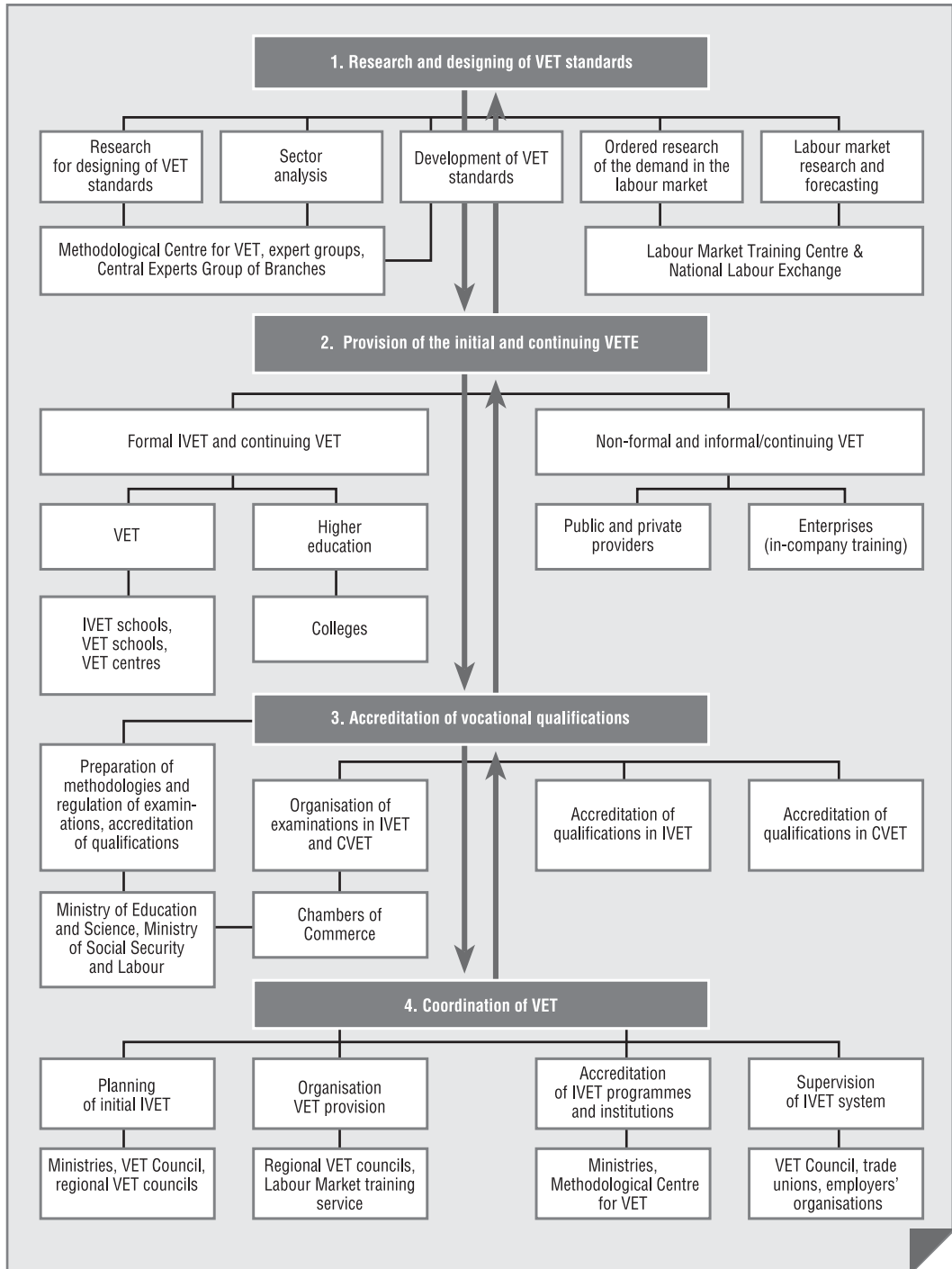
- (a) Stage I vocational training programmes provide training to pupils aged at least 14 who have not finished basic general education and wish to acquire simple qualifications. Normally the training lasts two to three years, with the opportunity to acquire basic general education and receive an appropriate certificate. Successful completion of this option leads to acquisition of a qual-

- ification corresponding to the second level of the currently designed national qualifications framework and to the same level of the European qualifications framework. At present, this qualification does not lead to certification but, with the introduction of the national qualifications framework, it will be recognised by special certification;
- (b) Stage II vocational training programmes are aimed at pupils who have finished basic school (10 forms) and only wish to obtain a vocational qualification. The duration of studies is two years, leading to a qualification corresponding to the third level of the current national qualifications framework (diploma of a qualified worker) and to the same level of the European qualifications framework;
  - (c) Stage III vocational training programmes are aimed at pupils who have finished basic school and wish to acquire both a vocational qualification and a secondary school certificate. The study lasts three years and leads to a qualification corresponding to the fourth level of the current national qualifications framework and to the same level of the European qualifications framework. Successful completion leads to a diploma as a qualified worker and a secondary school-leaving (maturity) certificate. The latter provides an opportunity to continue education at an advanced school, college, or university;
  - (d) Stage IV vocational training programmes are aimed at pupils who have finished a secondary school or gymnasium (have obtained a maturity certificate) and wish to acquire a vocational qualification. Depending on the complexity of the chosen occupation, the studies last from one to two years and lead to a qualification corresponding to the fourth level of the current national qualifications framework and to the same level of the European qualifications framework.

Vocational education and training institutions, enterprises, and non-State advanced schools are allowed to deliver formal vocational training only after obtaining a licence issued by the Ministry of Education and Science. Non-State higher education establishments can operate subject to a licence from the government.

Continuing vocational training is provided at a variety of institutions, such as vocational and advanced vocational schools, higher education establishments, courses organised by enterprises and firms, private courses, etc. Part of this training is formally regulated. Institutions providing initial vocational education and training also use their training facilities and staff to provide continuing vocational training: 47 % of vocational schools, 37 % of advanced VET schools

Figure 1. Processes and institutions of the VET system in Lithuania



and 80 % of higher educational institutions offer adult learners upgraded qualifications or retraining courses.

The Ministry of Education and Science and the Ministry of Social Security and Labour are the main policy-makers, initiators and coordinators of Lithuanian VET. The Methodological Centre for Vocational Education and Training under the Ministry of Education and Science provides methodological assistance to all levels of VET. Based on Lithuanian law, mainly State or the State-funded institutions (the only exception is the involvement of Chambers of Commerce and of the Chamber of Agriculture), remain the main VET actors. All of these institutions have their VET roles and responsibilities (see Figure 1).

Social partnership is one of the most important processes providing the basis for the functioning and continuing development of the VET system. Laužackas (2005) distinguishes three levels of social partnership in Lithuanian VET:

- (a) national policy level. At this level, social partnership is ensured through the activities of the Council of Vocational Education and Training, established on the basis of tripartite cooperation with the participation of government institutions, employers' organisations and trade unions. The Council cooperates with the Ministries of the Education and Science and Social Security and Labour in coordinating the VET activities (Figure 1). The main objective of the Council is to ensure coordination of all the main social partners' interests in the processes of the VET system. However, it should be noted that this institution plays an advisory role in decision-making processes;
- (b) sector level. At this level, the main institutions ensuring social partnership are branch expert groups and the Central Experts Group of Branches. These expert groups are constituted on a tripartite basis with representatives of the branch employers, trade unions and VET institutions. Their main responsibility is designing initial VET standards with the supervision of the Methodological Centre for VET (public institution established by the Ministry of Education and Science) – see Figure 1;
- (c) practical vocational level. At this level, different local working groups comprising VET school representatives and employers are the main actors. These groups develop vocational training standards within separate occupations and curricula for vocational schools. Social partnership can be organised in different forms. For example, organising practical training in companies illustrates a clear cooperation between VET schools and employers. However, this partnership is rather fragmentary and unsystematic (Laužackas, 2005).

The Lithuanian VET system is in a transitional period from the State-regulated (or supply model) to the market-regulated (demand) model. However, the State's dominant role in organising VET still prevails. This can be seen even in the initiative of the Ministry of Education and Science to introduce measures strengthening social dialogue, though the experience of other countries shows that 'securing a regular and rich supply of high, transferable skills depends neither on the free market or State intervention but on corporative self government of social groups' (Streek, 1989; quoted in Trade Union Congress, 2005).

The participation of social partners in VET was first defined in a *White paper* (1998) and the Vocational Training Law of the Lithuanian Republic (*Lietuvos Respublikos profesinio mokymo įstatymas*) (1997). Social partners have been allocated concrete functions in VET to:

- (a) supply proposals to the Lithuanian VET Council, while defining requirements for VET programmes (modules) and final qualification examinations;
- (b) organise final qualification examinations;
- (c) register practical training agreements/contracts between school, enterprises and a trainee;
- (d) supervise practical training agreements and their implementation.

Taking into consideration that Lithuanian VET and general education have been traditionally school- (but not company-) oriented and centralised, this new law radically reformed VET.

The *White paper:VET* (1998) described social partnership as regular cooperation, negotiation and coordination of interests among governmental institutions (mainly, Ministries of Education and Science, Ministry of Social Security and Labour and VET schools), employees' representatives (trade unions) and employers' representatives (associated business structures). 'The involvement of social partners in the coordination of supply and demand of skills and qualifications is often manifested in neo-corporatism, which refers to tripartite bargaining of trade unions, employers' representatives and the State' (Trade Union Congress, 2005). Thus, the first practical steps, trying to coordinate educational and vocational activities, were implemented in 1998, when the State delegated several concrete functions in VET to social partners – Lithuanian Chambers of Commerce, Industry and Crafts – and, a few years later, to the Chamber of Agriculture. Unfortunately, trade unions were not encouraged to share VET responsibilities, mainly because of their weakness.

According to the Methodological Centre for VET (2005), the responsibilities for social partners in VET were distributed as follows.

Table 1. **The responsibilities of social partners in VET**

	Responsibilities of social partners	Level of responsibility
National level	Perform strategic and advisory functions in cooperation with the Ministry of Education and Science and the Ministry of Social Security and Labour for VET questions	Advisory
	Organise and participate in final qualifications examinations, evaluate the acquired qualification	Decision-making
Regional level	Coordinated consultancy and expertise; initiate new training programmes, help to organise practical training for pupils; updating of practical training basis	Advisory
Sector level	Advisory function in developing VET programmes; approval of the developed VET standards	Advisory
Company level	Participate in managing training institutions, while defining qualifications needs; participate in developing relevant training programmes.	Advisory

Table 1 illustrates the present state of social partnership in Lithuanian VET. Organising accreditation and recognition of qualifications is the only area where social partners have decision-making power. Because of that, social partnership has not been effectively developed at all levels of the VET system.

## PART II.

### The main problems of social partnership in VET

Today, social partnership development issues in Lithuania are discussed from a bottom-up approach. It is of primary importance to identify the main barriers and problems which do not allow social partnership to develop successfully in vocational education and training.

First, employers are not satisfied with the skills and competences of VET school leavers. This was apparent in recent interviews with the industrial companies in the frame of the Leonardo da Vinci research project CVTS revisited. Employers claimed that the main problem lies in inappropriate vocational training curricula ('school leavers do not have the competences that we need') and in the low



quality of practical training ('school leavers do not have any practical experience'). The existence of such claims shows that participation by employers or their organisations in the accreditation of qualifications of VET school leavers is too formal and ineffective.

Representatives of VET institutions often express the opinion that the role of employers in vocational training and accreditation of qualifications is very fragmentary. In public debates on VET policies, there is a tendency to shift the responsibility for problems or shortages to other partners, criticising them for outdated curriculum and training methods (position of employers towards VET institutions) or for the passive attitude to the partnership in organising practical training and curriculum design (position of VET institutions towards employers).

A prerequisite for an effective social partnership in assessing qualifications is sharing of responsibilities and opportunities between VET institutions and employers in designing and providing qualifications. This can be assured only by the active partnership and cooperation of these stakeholders. When employers are active in creating and developing VET design and organisation of practical training, they will be sufficiently motivated and have sufficient theoretical and practical background for effective cooperation in the accreditation of qualifications. They understand that their involvement in curriculum design and in organising practical training becomes more and more important to preparing and developing new human resources and to ensuring the competitiveness of companies in the increasingly competitive human resources market. There is an increased interest among branch organisations in cooperating with VET institutions. However, strong competition for the skilled labour force, increasing the risk of poaching and emigration of the skilled workforce, discourages employers from more significant financial investment in vocational training projects (for example, establishment of practical training centres).

A second aspect is the comparatively slow establishment of the legal background regulating initial and continuing vocational education and training, provision, accreditation and recognition of vocational qualifications. In 2003, the *Guidelines of the national strategy of education of 2003-2012* (*Valstybinės švietimo strategijos 2003-2012 metų nuostatai*) were approved. These guidelines foresee transferring a large part of responsibility for the initial and continuing vocational training to regional governments. Other important changes foreseen include increasing the proportion of in-company practical training in VET programmes to at least half of all training time and development of the national qualifications system to facilitate coor-

dination of supply of qualifications with demands from the labour market.

Next is the slow and rather ineffective establishment and development of interest groups representing employers and employees. Trade unions in Lithuania represent only about 20-25 % of the employees (Krupavičius and Lukošaitis, 2004). This unpopularity has several contributing factors:

- (a) the negative inheritance of the Soviet tradition of trade unions and lack of real leaders with new thinking and understanding of the changed role and objectives of unions. In the Soviet period, the *raison d'être* of trade unions was the ideological supervision of the working population, not the defence of their interests. Therefore, there were no conditions for developing leaders capable of gaining the confidence of members and organising activity oriented to the defence of interests of employees in industrial relations;
- (b) because of the economic and social complexities of transition to the market economy and the growth of unemployment during the first decade of the independence, employers acquired more powers in negotiations with employees and used this power by pushing employees to accept their proposed conditions. This situation also discouraged employees from participation in unions. However, laws regulating labour relations opened opportunities for unilateral decisions by employers in recruitment, work conditions, training, career and wage setting (Dobryninas, 2000);
- (c) the development of employers' organisations was also very slow and difficult. According to Krupavičius and Lukošaitis (2004), organisations representing the interests of business and employers were unstable and this prevented them from developing firm traditions of corporative representation of business interests;
- (d) there are no incentives on the government side for employers' organisations to invest in human capital, though there is always a risk that State incentives may develop a VET system very much dependent on financial benefits to employers. Culpepper notes that the 'high-skill equilibrium is vulnerable to a change in the pattern of the incentives to invest in human capital' (quoted in Burgess and Symon, 2005). The Lithuanian situation shows the other extreme. Economic and social factors remain the main incentives for employers to invest in the development of employee skills.

### PART III.

## Social partnership in the western European countries – what experience can be transferred to Lithuania?

Social partnership in Lithuania, as in other post-Soviet countries, is a new phenomenon compared to such countries as Germany, the Netherlands or Austria, which have long traditions of social dialogue. Referring to the ideas of Finegold and Soskice (1988), one can discern the following factors for effective social partnership in VET.

First is provision of reliable information flows about the appropriate skills levels. This information can be ensured by special institutional instruments and mechanisms, such as national frameworks of qualifications. Countries with liberal market economies, which do not have an efficient industrial relations system playing a regulatory role in employment, labour market and human resources development, tend to compensate by establishing comprehensive and prescriptive frameworks of qualifications. However, if the information on appropriate skills levels and qualifications is too prescriptive, it cannot reflect changes in the labour market and in the world of work, especially in liberal market economies. The quality of available information on appropriate skills levels, labour market needs and the opportunities provided by VET institutions depend on the real intentions and interests of the social partners. For example, if the competition strategy of an enterprise is based on low labour costs, deskilling and work intensification policies (Warhurst et al., 2004), such an enterprise may be unaware of, or reluctant to provide, information about skill needs or to cooperate with VET institutions. The same is true for VET institutions. If vocational schools or higher education institutions depend only on the State and are too isolated from the real world, they usually lack experience of social partnership and are not interested in disseminating sufficient information about the training possibilities offered.

Smooth relations between initial and continuing vocational training also have an impact. Two main priorities can be discerned in initial and continuing vocational training in the human resources development strategies of the corporate actors.

A shortage of skilled workers that cannot be solved by enterprises alone leads to priority in hiring skilled employees and demand for qualifications provided by initial vocational training. Robert Boyer noticed that intensive technological and organisational changes in professional activities also incite companies to invest more in

recruiting new employees from VET school, college and university graduates rather than relying on continuing vocational training at the workplace (*Conseil d'analyse économique*, 2000). This is because hiring costs in such cases are lower than training costs and enterprises often lack the necessary expertise to provide the skills to respond to intensive technological and organisational change. In this situation, enterprises are more interested in cooperating with VET institutions to design, provide and assess initial vocational training.

Priority for continuing vocational training is given when the qualifications of human resources provided by initial vocational training cannot satisfy the needs of the enterprises.

Individuals in the labour market have similar strategies and priorities. When there is a sufficient supply of skills in the labour market and intensive competition for high quality jobs, individuals prefer to get the highest possible qualification in initial vocational training and higher education. However, a shortage of skills and improving employment perspectives in the labour market stimulate them to give priority to earlier employment and the development of skills through continuing vocational training. In this situation, enterprises are more interested in cooperating with providers of continuing vocational training services.

It is possible to see the influence of both factors in Lithuania. Enterprises traditionally refer to initial vocational training and higher education institutions, requiring them to provide skilled human resources. However, cooperation between enterprises and initial vocational training institutions has only recently started to improve with increased emigration among skilled workers and consequent difficulties finding skilled employees in the labour market. Because of this, enterprises are also developing their cooperation with providers of continuing vocational training.

In western European countries, independent interest groups strongly influence cooperation between different industrial relations stakeholders in the supply, evaluation and recognition of qualifications. Sometimes governments consider national economic and social needs and make suggestions on policies of initial and continuing vocational education and training. The interest groups actively discuss these government initiatives and, after negotiations, they very often become common initiatives. Some researchers (Aguilera and Jackson, 2003) point out that the German model is an interesting case, where 'firms participate in occupational training to create publicly certified skills that are portable across firms'. Given the problems of the social partnership in Lithuania, the German model is hardly transferable. Another interesting model of social partnership in VET

can be observed in the Netherlands, with its inclusive participation by all social partners in decision-making, a bottom-up approach to social partnership, and reference to sectoral qualifications structures. The ‘polder model’ of social partnership helped to establish a constructive and compromise-based negotiations mechanism between employers, trade unions and the State. All political and social stakeholders were involved in formulating and implementing the new law on adult and vocational education (WEB) in 1996. This law fore-

**Table 2. Transferable elements of the Dutch social partnership model to the VET system of Lithuania**

Weaknesses of the social partners' involvement in the Lithuanian VET system	Potentially transferable elements of the experience of the Dutch model of social partnership	How the application of the experience of the Dutch model of social partnership could address the weaknesses of social partnership in the Lithuanian VET system
Distrust and dissatisfaction of employers with the VET system; lack of involvement and motivation to cooperate with VET institutions in the processes of the qualifications system: designing, provision and accreditation of qualifications.	Inclusiveness of all social partners in the decision making process in VET. Bottom-up approach of social partnership and reference to the qualifications structures of branches.	Stakeholder participation in the design of qualifications, provision of training and the accreditation of acquired competences and qualifications should be expanded. Creation of the national system of qualifications provides such possibility. In addition, the inclusion of all stakeholders is one of the most important preconditions for successful implementation of the national qualifications system.
Lack of experience of the social partnership in VET among the interest groups and corporate institutions representing the interests of employers and employees.	Experience of the partnership between the unions, employers' organisations and VET institutions at local level. (Partnership between the ROCs, local employers and unions in the design of curriculum, practical training provision and accreditation of qualifications).	To create the experience of VET social partnership through the development of local VET partnership projects, involving local employers, unions and VET institutions in the regions.
Lack of a strategic approach to development of human resources from all stakeholders: employers' organisations, unions, VET institutions and State. Lack of understanding of the role of social partnership in the development of VET and human resources can also be noted.	The Dutch social partnership model demonstrates that social partnership on the national level, based on VET legislation would not be effective without active cooperation of social partners at sectoral and regional levels.	Finding a compromise between the prescriptive approach in designing qualification structures and setting examination guidelines and the need to consider the changing models of professional activity to increasing flexibility, continuing acquisition and recognition of new skills and competences.

sees sharing of responsibilities among social partners in VET at regional level. It established the regional vocational training centres (ROCs) on the basis of the 'mergers of the former sectoral vocational schools, the adult education centres and the apprenticeship support structure' (Cedefop, Nieuwenhuis and Shapiro, 2004).

According to Cedefop, Nieuwenhuis and Shapiro (2004), the Dutch social partnership model established by the law on VET in 1996 is mainly based on the assumptions of the industrial VET system. Employers are able to formulate their qualification needs in the sectoral qualifications structures and employees are well organised in the networks and trade unions which protect the permanence of their employment status and ensure social welfare. The new paradigm of the knowledge-based economy requires different approaches to social partnership, based not merely on the prescription of training needs by employers and the execution of these prescriptions by VET institutions but on 'the flexibility and expertise of colleges to organise flexible pathways towards competence in close cooperation with the local companies'.

What are the positive aspects of the Dutch model and how can they be applied in Lithuania? This question can be answered by analysing how the potentially transferable elements of the experience of Dutch model could address the main weaknesses of the social partners' involvement in VET in Lithuania (see Table 2).

#### PART IV.

### Accreditation and recognition of qualifications in Lithuania and its development perspectives

Previously, vocational schools themselves conducted assessments according to general regulations set by the Ministry of Education and Science. This system made it difficult to ensure the comparability of qualifications awarded. To ensure a more consistent approach, the Ministry of Education and Science decided to involve the employers' organisations and set up a process of reform in 1998. The modified examination system was implemented throughout the country in 2003.

A decree from the Ministry of Education and Science regulates the organisation of the final examinations for VET students: it stipulates the responsibilities of Chambers of Commerce in the process. The Chambers have the role of monitoring the preparatory phase of final qualifications examinations by involving specialists from enterprises to review vocational programmes, and to develop ques-

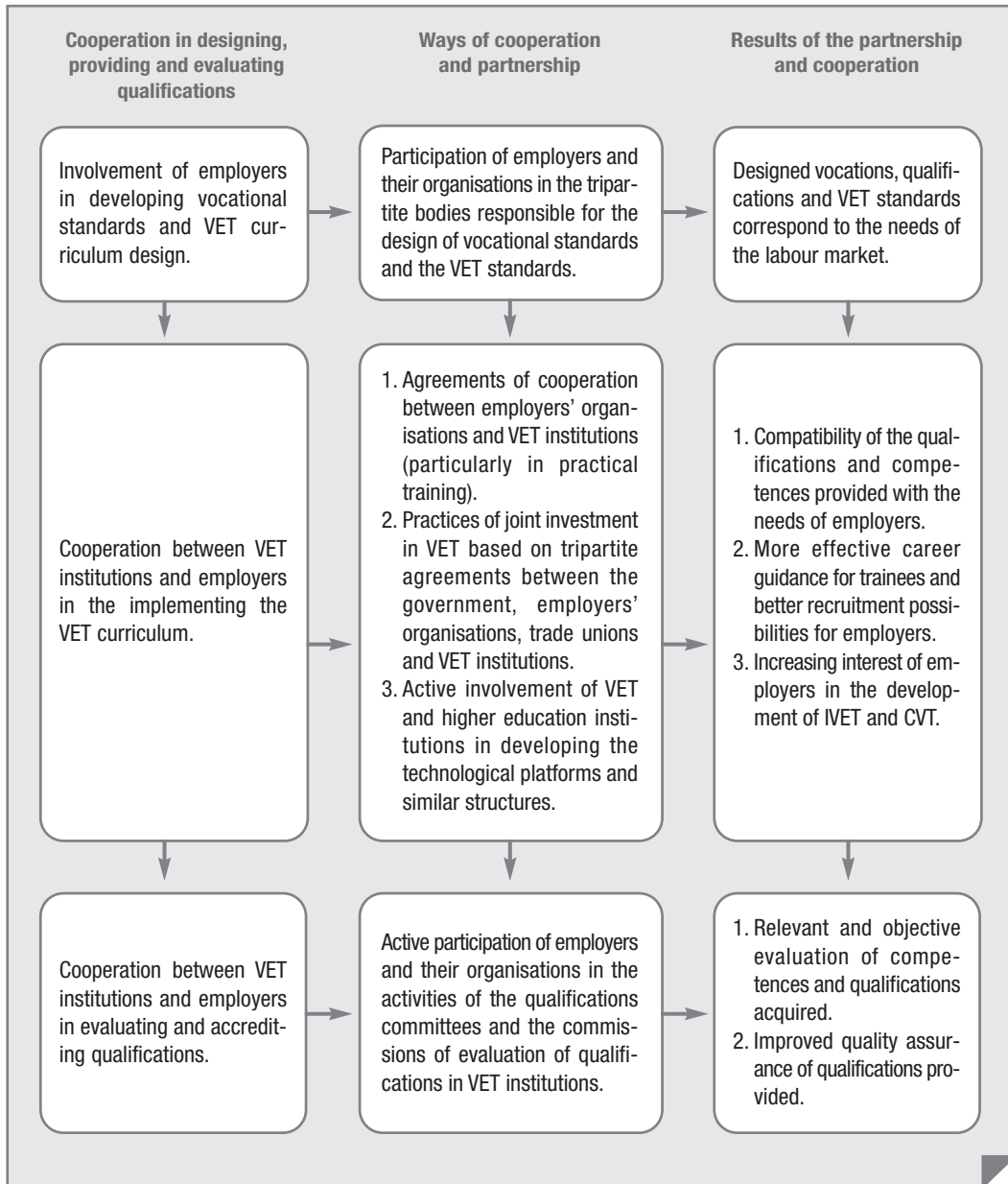
tions and tasks for a theory exam in cooperation with vocational schools. In addition, Chambers of Commerce are responsible for supervising practical training in companies to ensure that VET students gain the necessary practical skills and knowledge.

The development of social partnership in accrediting and recognising qualifications is closely related to the establishment and implementation of the national qualifications system in Lithuania. Accreditation and recognition of qualifications comprise a major subsystem of the national qualifications system. This subsystem is related to the other subsystems: designing of qualifications and acquisition of qualifications. A systematic approach to accreditation and recognition presumes that the quality and effectiveness of the process depends not only on its internal factors but also on the factors of the other subsystems. Therefore the quality and effectiveness of the social partnership in accreditation and recognition depends to a large extent on the cooperation of the social partners in design and provision of qualifications.

Two levels of its development of social partnership can be distinguished in the accreditation and recognition of qualifications: the normative level and the process level.

(a) the normative level is related to establishing the legal basis, rules, norms, regulations and the institutional infrastructure of this partnership. The national qualifications system will create a comprehensive institutional and legal framework to assist the development of social partnership in this respect. The concept of the national qualifications system foresees that VET institutions shall be responsible for organising the internal accreditation of qualifications. The qualifications committee prepares the accreditation methodology and coordinates the process across the country. This committee also empowers VET schools or other organisations to organise internal accreditation and approves the results. The qualifications committee is established on a collegial basis and comprises employers' representatives and experts from VET institutions. Analysing this institutional infrastructure, one can note intentions to combine social partnership based on the initiatives of the stakeholders and interest groups with an attempt to establish the centralised control and supervision of the accreditation and recognition of qualifications. Regarding developing the legal basis of the accreditation and recognition of qualifications, the main challenge is the adoption of the new laws and legal regulations to the existing situation of the partnership in this field. The legal basis should leave enough space for initiatives and negotiations between employers and VET institutions.

Figure 2. **Process of social partnership in the development of VET**



(b) the *process level* of social partnership. The development of social partnership and cooperation between employers, unions, VET institutions, government and other partners in the field of accreditation of qualifications depends on the existing experi-



ence and networks of cooperation. The setting of the advanced legal basis with the comprehensive rules and proceedings cannot compensate the lack of the experience of cooperation or to change the existing models of the institutional behaviour. The process of social partnership creates new experiences opening possibilities for the improvement and development of accreditation and recognition of qualifications. An example of model of a social partnership process is given below:

## Conclusions

1. The development of social partnership in accrediting and recognising qualifications in Lithuania was influenced by the institutional and socioeconomic factors of the development of a reestablished State and post-Soviet society: lack of interest and initiatives of participation from employers and their organisations, reform of the VET system, creation and development of new institutions. Because of the absence of activeness and initiatives from social partners, government institutions have to play a more important role in proposing different initiatives in the field of accreditation and recognition of qualifications. In most cases, social partners only play an advisory role.
2. The analysis of the existing experiences of social partnership in the accreditation of qualifications suggests that the effectiveness of social partnership can be achieved through the relevant legal basis and the active involvement of stakeholders on a voluntary basis. Social partnership can be strengthened by implementation of important national projects like national qualifications frameworks.
3. Social partnership cannot be effectively implemented in the accreditation and recognition of qualifications if it is underdeveloped in the designing and provision of qualifications. Today there can be noticed separate attempts to involve the social partners in the measures of accreditation and recognition of qualifications. However, these attempts lack a systematic approach. In this regard, the development and implementation of the national qualifications system in Lithuania presents a unique opportunity to strengthen social partnership in the whole process consisting of design, provision, recognition and accreditation of qualifications.
4. The normative and process level of the development of social partnership in the accreditation and recognition of qualifications can be distinguished. Setting the legal basis and institutional infra-

structure is very important for the development of the social partnership. However, the model of the social partnership is shaped by the experiences and approaches of the stakeholders and cannot be changed in a short time.

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# Skills development while in temporary work?

**Dr Gesa Münchhausen**

Researcher

Bundesinstitut für Berufsbildung (Federal Institute for Vocational Education and Training, BIBB)

Section 2.4, 'Skills Development'

## **Keywords**

Skills development,  
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work-based learning,  
continuing training,  
informal learning

## **SUMMARY**

**The question of skill development in temporary work has so far been neglected in research and practice. The expansion and speciality of this way of earning a living – particularly as a result of the frequently changing demands on different workplaces and the strategy of lifelong learning favoured by educational policy in order to obtain and improve qualifications – make it necessary to demonstrate plans for skills development for this target group. The findings make it clear that opportunities to develop skills are essentially to be found in temporary work itself, i.e. by means of learning while working. In this form of the learning process, knowledge and aptitudes which have already been acquired are combined with capabilities which develop in the course of working. As a result, this process of working and learning produces informally acquired skills which could be documented and provide grounds for targeted support of skills in temporary work.**

## Background

Throughout Europe, temporary ways of earning a living, such as temporary work or fixed-term contracts of employment, are no longer a peripheral phenomenon, since more than one eighth of the European workforce is in this type of employment (cf. EIRO, 2002; cited by Le Mouillour, 2002). Nevertheless, in all the countries of the European Union these employees benefit from companies' skills development measures to a considerably lower extent than the permanent workforce. There are only a few countries in which attempts have been made to develop the skills of temporary workers, e.g. the Netherlands, where, for instance, times when temporary workers are not working are used for the targeted development of skills to a much greater extent. In Germany, however, this subject has so far not played a large role.

As a result of the increased pressure of competition, firms demand ever more flexible, adaptive employees who can be placed in a versatile, short-term fashion. Therefore, the proportion of employees with standard employment contracts has been decreasing since 1970 (cf. Schäfer, 2001; Sauter, 1998). Standard employment is understood here to refer to non-fixed-term, full-time employment in which a contract of employment is entered into which assigns certain rights of control to the employer and which is based on the provisions of employment law and social welfare law. Since the 1970s, comprehensive measures have existed with respect to innovations under employment law and social welfare law, such as more flexible working time arrangements, new arrangements for pension start dates, reduced protection against unfair dismissal, facilitation of fixed-term contracts of employment, a turning-away from comprehensive collective wage agreements, etc. (cf. Schulze Buschoff and Rückert-John, 2000). In 1988, three quarters of the workforce had non-fixed-term, full-time contracts of employment; nowadays, only two thirds of all employees have 'regular' working arrangements (cf. the 2003 Micro-census). As many as 35-40 % have 'non-regular' contracts of employment, which, as well as teleworking, part-time work, 'sideline' employment and new forms of self-employment and freelance work, also include temporary work and fixed-term employment.

The official description of temporary work is 'professional supply of temporary workers'. This exists when employers supply employees to third parties to perform jobs for them for the purpose of economic gain. The temporary workers are in a triangular relationship, since they work for a limited period of time in a firm to which they are 'loaned' but receive their salary from, and have the usual social security contri-

butions paid by, the temporary employment agency, with which they usually conclude a non-fixed-term contract of employment. Depending on the interests involved, temporary work may take on different functions: from the point of view of the undertaking, temporary workers are available workers; from the point of view of the temporary worker this is a way of avoiding unemployment; from the point of view of the job market, temporary employment may be regarded as an intermediate stage in integrating unemployed people into non-fixed-term contracts of employment, and from the point of view of qualifications, temporary work provides an opportunity to develop occupational skills (cf. Wittwer and Münchhausen, 2001).

Since 1993, the number of employees placed in temporary work has more than trebled, from 121 000 to just under 400 000 in 2004 (Table 1).

Table 1. **Employees placed in work in Germany – average figures**

	Total	Men	Women	Proportion (%)
1994	134 443	109 550	24 893	0.49
1995	165 819	134 646	31 173	0.58
1996	175 798	142 692	33 106	0.64
1997	200 541	161 626	38 915	0.78
1998	245 780	196 258	49 522	0.93
1999	275 838	217 490	58 347	1.04
2000	328 011	252 185	75 826	1.22
2001	341 053	263 985	77 067	1.28
2002	319 299	244 331	74 960	1.22
2003	330 219	253 221	76 997	1.29
2004	385 256	292 394	92 863	1.51

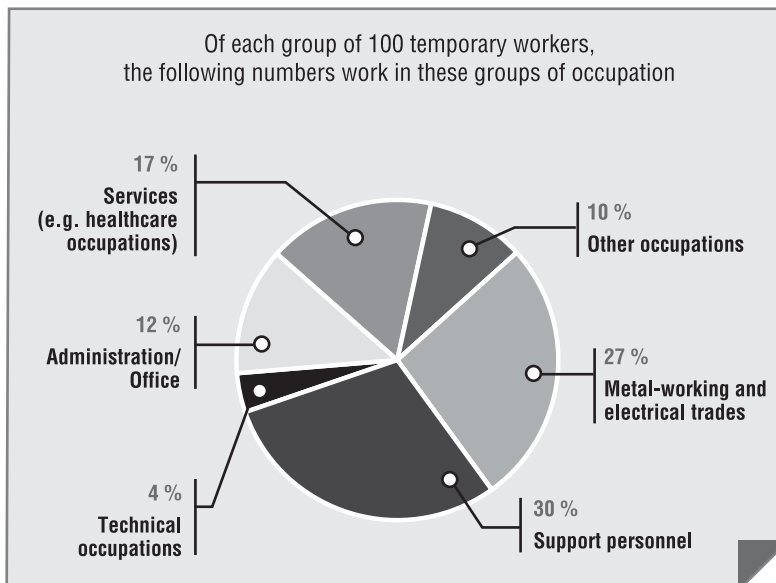
Source: 2005 BA [Bundesagentur für Arbeit, Federal Labour Agency] statistics, *IAB Kurzbericht* [Summary Report] 14/05.

The reason for these strong growth rates, in addition to economic developments, is the introduction of the *Personal-Service-Agenturen* (PSAs, Personnel Service Agencies). The federal government set up these PSAs with the objective of re-integrating the unemployed into the labour market. The model for these agencies is based on the system of lending and borrowing that is used in temporary work.

The number of employees involved in PSAs is relatively low in comparison with the overall number of temporary workers. In 2004, the proportion of temporary workers (excluding PSA employees) was still only 1.4 % (cf. Jahn, 2005).

In 2004, the predominant proportion of temporary workers was placed in the metal-working and electrical trades (27 %), or in work as support personnel (30 %), in services (e.g. healthcare occupations) (17 %), in administrative and office work (12 %), in other occupations (10 %) and in technical occupations (4 %).

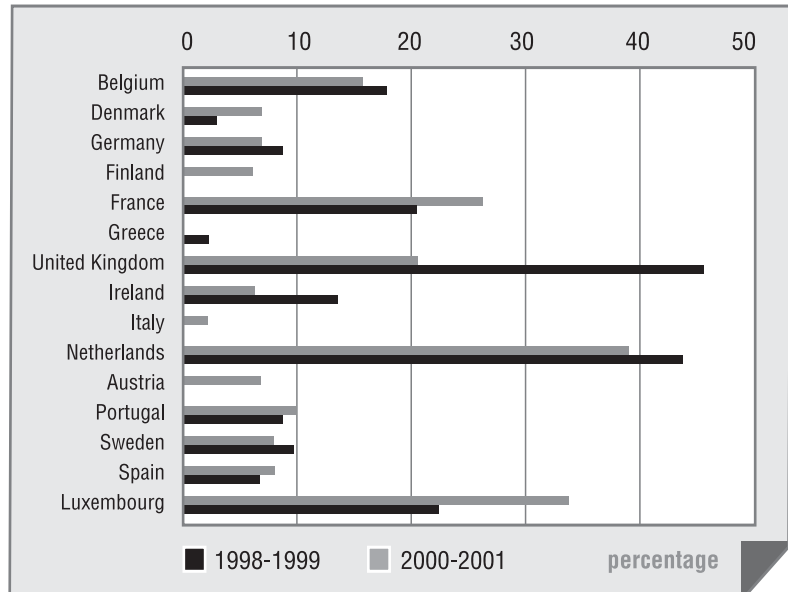
Figure 1. **Temporary work, 2004**



Source: IGZ 08/05.

However, temporary work in this country is still some way behind the international comparative figures. In the USA, according to Sennett (1998), temporary work is still the fastest growing sector of the employment market. In Europe, the frontrunners in temporary work are the Netherlands (4.5 % of 7.2 million working people) and the United Kingdom (4.7 % of 28.1 million) (cf. *IAB-Kurzbericht [Institut für Arbeitsmarkt- und Berufsforschung (Institute for Employment Research) Summary Report] No 21/2002*).

Figure 2. **Proportions of temporary workers in the European Union**



Source: CIETT (2000, 2002), national reports from *IAB Kurzbericht*.

## The necessity of developing skills in temporary work

As a result of the processes of change in the economy, technology and society, it is becoming ever more important for workers to develop their skills in order to retain their individual employability. Occupational competence is the sum of the capabilities, skills and knowledge which make people capable of acting and reacting in both familiar and new situations (cf. Kauffeld, 2002). If there are no opportunities to use one's own skills, there is a danger that they will be lost (cf. Münchhausen, 2007).

The objective of developing skills is to foster employees' occupational competence to act (professional competence, social competence, methodological competence and personal competence) to enable them to deal with the complex changes of environment and resulting changing requirements. The measures to develop competence may be subdivided into formalised forms, such as seminars, job rotation and competence recording, and non-formalised forms, in which the emphasis is on learning while working, for example



concomitant coaching and reflection discussions, self-directed learning or quality circle within the group <sup>(2)</sup>.

Competence development is of great importance to temporary workers in particular, since they have committed themselves to changing workplaces and thus to changing occupational activities and a changing professional/social environment. They are confronted with a large number of occupational changes, which are frequently accompanied by a feeling of insecurity (in the workplace) and a lower level of loyalty and commitment to the company.

Temporary workers frequently have to cope with an intensification of work and time pressure, but they are hardly ever provided with support measures by means of occupational competence development within the company. To date, vocational training research in Germany has scarcely touched on the question of competence development for this target group. However, since the type of temporary employment is becoming increasingly more popular, it is very important that remedial action be taken here, by identifying, analysing and assessing the possible ways of developing competence in these new forms of employment. Competence development is required, in the interests of the individual temporary employees, in the interests of companies and the entire national economy (cf. Schickler, 2002).

The research findings, which have to date been selective, confirm that temporary workers are only provided with a small degree of support in their competence development (cf. Bernien, 1998). In a 2001 study, the Cologne-based *Institut zur Erforschung sozialer Chancen* (Institute for the Research of Social Prospects, ISO) established that in the long term temporary workers are offered hardly any further training. As a rule, undertakings are only interested in short-term utilisation of labour. It is logical in terms of making the company more flexible not to include workers on fixed-term contracts in the company's competence development or further training programmes in order to avoid additional direct or indirect costs. In many cases, there are no incentives in companies to make it possible for temporary workers to participate in competence development and further training, since it has not been clearly established who in particular can acquire the returns and the benefit. Furthermore, it is unclear who funds this and what form of competence devel-

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<sup>(2)</sup> Recently, workplace learning in particular – for example by setting up special learning infrastructures, a combination of learning locations, integrating learning times at the workplace – has become increasingly significant (cf. Baethge and Baethge-Kinsky, 2002).

opment is appropriate for this target group (cf. Bolder et al., 2005).

In 1998, Baethge and Schiersmann established that the combination of the new, more flexible employment relationships and current concepts of competence development constitutes a pivotal field of research.

The subject of competence development for temporary workers has also been neglected in research work in European countries. This is confirmed by investigations by the Wissenschaftliches Zentrum für Berufs- und Hochschulforschung (Centre for Research into Higher Education and Work) at the University of Kassel, which has set up international monitoring of the link between, inter alia, these employment relationships and competence development on behalf of the development programme 'Learning Culture of Competence Development' (cf. Le Mouillour, 2002) <sup>(9)</sup>.

The findings of the second European continuing training survey (CVTS II – Continuing Vocational Training Survey) provide a detailed overview of a very wide range of aspects of (formal and informal) continuing training in enterprises, but no information is provided about temporary forms of employment and of earning a living (cf. Grünewald; Moraal; Schönfeld, 2003).

## Objectives of the research work

Against the background described above, a research project by the Bundesinstitut für Berufsbildung (Federal Institute for Vocational Education and Training, BIBB) aimed to obtain findings regarding the organisation of competence development for temporary workers.

Its objective was to follow up the question of how the learning potential of changes can be used in a targeted manner to develop the skills of employees, since a survey carried out at the University of Bielefeld revealed that many temporary workers see the supposed weak point of temporary work, i.e. frequently changing job, as in fact an advantage, because new workplaces and changes opened up new options for them (cf. Wittwer and Münchhausen, 2001). The objective was to investigate the extent to which temporary work can be organised in such a way that employees can gain qualifications while working and can then use these new qualifications in a targeted manner (e.g. development of a support worker to become a skilled

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<sup>(9)</sup> However, in the meantime further training for temporary workers has been defined as a priority for the CIETT (cf. CIETT 2001) and the European Community within the scope of negotiations on the Temporary Workers Directive (cf. COM (2002) 149).

worker). It was therefore also an objective to find out how the skills acquired can be made transparent, since this is a mandatory precondition for recognition of them.

Overall, the findings obtained are intended to provide starting points for organising competence development for temporary workers. These can then serve as a basis for further quantitative empirical surveys. Moreover, transferable starting points will present themselves for other forms of employment which are encountering changes of activities and other changes, such as fixed-term employment, so-called new autonomy and work on projects.

Important starting points for organising competence development for temporary employees can be starting points at which the working process is understood as a learning process (learning at work).

The initial qualifications and educational backgrounds of temporary workers have a decisive impact on the processes and tools for competence development, because when supporting competence development enterprises make a clear distinction between the permanent workforce and the temporary workers placed there for a limited period of time.

The findings of the BIBB research project are described below.

## Previous research findings

### **Case studies in the Netherlands and France**

Within the scope of the BIBB research project, an investigation was carried out to determine how competence development for temporary workers in the Netherlands and France is organised and what experience had been with it. To this end, interviews based on guidelines were used in temporary employment agencies and the enterprises which employ these target groups and enable them to develop their competence and skills. The findings were evaluated in accordance with the qualitative content analysis used by Mayring (2003).

The consideration of the Netherlands is interesting in so far as temporary work is more widespread there in quantitative terms and has greater social recognition than in Germany. It seems to be 'more normal' to be in temporary work there. However, activities for competence development among employees have only existed for two years (cf. Münchhausen, 2007).

A significant feature of the Dutch temporary employment market is that more than 40 % of temporary employees are still at college

(cf. [www.abu.nl](http://www.abu.nl)). Therefore, this group of people is not necessarily interested in a qualification. Almost 75 % of temporary employees are younger than 35, i.e. it is their first or second job. The average duration of a contract with the temporary employment agencies is 155 days.

These facts are of significance for the question of competence development. Following a new wage agreement, in 2004 a start was made on setting up fund-linked personal further training budgets. The budget is set up for a maximum of three years, and each year 1 % of the total wages paid into the fund by the temporary employment agency are added to it (i.e. a total of 3 %). The longer someone works for a temporary employment agency, the higher the budget for further training.

There are two essential points here: firstly, it is a tool for the individual temporary workers to be able to take up further training or to have the money paid to them. Secondly, it provides stimulus for the enterprises to invest the money in their own temporary workers or in their continued training, since they have to pay it anyway.

However, this process does not begin until after an employment period of 182 days (phase model), i.e. more than the average duration of a contract. Previously, temporary workers had no right to further training, but there is a lack of measures to support and motivate temporary workers (key phrase: groups with low take-up of training), since the question of specific implementation is left to the parties involved.

With respect to the question of recognition and certification of the skills acquired while on work assignments, various activities also exist to an increasing extent in the Netherlands. Processes and tools for recording and assessing competence and learning while working are being developed (cf. [www.cinop.nl](http://www.cinop.nl)). To date, however, there has been hardly any recognition of the various work assignments of the temporary workers in the companies in which they are placed.

The study of temporary work in France was produced in cooperation with Céreq (Centre d'études et de recherches sur les qualifications, Marseille). The data were essentially ascertained by theoretical research and empirical editing of literature available in France. Moreover, expert discussions were held with representatives of the temporary employment sector. The following findings were obtained in the course of this study.

In France, the number of temporary workers, predominantly employed in commerce and industry, increased from 1996 to 2000 from around 250 000 to more than 750 000, which corresponds to a proportion of 2.5 %.

In 2004, temporary employment relationships lasted for an average of 13 days (both the duration of 'loan' to companies using temporary workers and that of employment with temporary employment agencies).

Temporary workers are relatively young: more than half are under 30, and almost three quarters are men. In 1998, almost a third (31 %) of temporary employees had not completed vocational training.

Temporary workers are employed primarily in the building trade and in industry. The principle of equal treatment, in accordance with which each temporary worker is entitled to the same pay as a permanent employee, fundamentally applies. In addition, each temporary worker receives a so-called 'precariousness premium' amounting to 10 % remuneration in compensation for the precarious nature of the employment relationship.

Legally, all French companies with more than nine employees must spend a certain percentage of gross pay (since 2004 the figure has been 1.6 %) on funding further vocational training. In the temporary employment sector, the social parties have fixed a higher contribution of 2 %, i.e. in France, as in the Netherlands, an attempt is being made, by means of an appropriate statutory and/or collective wage agreement arrangement, to ensure that temporary workers receive further training.

According to the data gathered from the tax return and processed by Céreq, in 2002, 25 % of all temporary workers participated in further training measures, which had an average duration of 28 hours. In 2004, 59 % of participants in the transport/warehousing sector received further training.

In addition to these formal further training opportunities, attempts to develop competence informally are increasingly widespread. The 2002 'Social Modernisation Act' and the procedure which it introduced for recognising skills acquired while working meet with particular resonance in the field of temporary employment: regularly changing one's workplace, occupation and working environment boosts skills, which should be recognised in the form of certification. Thus, for example, the temporary employment agency Adecco has developed a 'competence passport' in conjunction with the Professional Association for Adult Training (AFPA), which makes it possible for temporary workers to acquire a recognised qualification through their professional experience.

Although this approach is promising, the fact that in France, as in the Netherlands, the recording and recognition of skills acquired informally while working, i.e. by means of occupational experience,

is still in its infancy cannot be ignored (cf. Möbus, 2007, p. 223 et seq.). However, it can be seen that these developments in particular hold future opportunities to develop competence in temporary work, not least also because the formal training system no longer provides adequately qualified workers, and a predicted lack of skilled workers needs to be countered by alternative ways of acquiring qualifications.

### **Survey of temporary employment agencies**

In addition to the case studies described in Germany's two neighbouring countries, within the scope of the BIBB research project in Germany, temporary employment agencies were asked to determine the activities and further training options in temporary work. The temporary employment agencies concerned were exclusively agencies which supply employees on a professional basis. In preparation for the survey, first of all:

- a special address database for temporary employment agencies was drawn up by reconciliation and cleansing of various data sources, and was imported into the survey software,
- the survey tool was developed and
- transferred to the CATI survey software developed by the IES (see below), and
- the pretest was carried out.

A subtly differentiated quantitative analysis of work placements and activities in temporary work was considered necessary in order to carry out the survey in the undertakings. Previous studies are merely roughly subdivided into superordinate occupational groups, but for the issue of competence development a substantially more differentiated description is required. This was achieved by means of a research assignment to be allocated externally.

To this end, a telephone survey (CATI – Computer Aided Telephone Interview) was carried out by the Hanover-based IES (Institute of Development Planning and Structural Research at the University of Hanover) concerning the aforementioned sectors. In total, 365 telephone interviews with representatives of the temporary employment agencies were completed. Around 45 % of these agencies employ 1-49 workers, 48 % employ 50-249 workers, and only 7 % have more than 250 employees.

The representative survey of the temporary employment agencies provided comprehensive information about the structure of temporary employment and the organisation of further training. The findings of the survey are summarised and evaluated below.

The majority of enterprises working in the field of temporary employment are small and medium-sized enterprises with 10-99 employees whose principal field of business is usually supplying temporary workers. Other fields of business are related activities such as direct placement in work and advisory and/or organisational services for undertakings. Additionally, they operate in other, very diverse sectors, such as industry, call centres and IT services. Two thirds of temporary employment agencies are independent operations. They predominantly place workers in the local area.

The largest economic sector by far is the production industry, which has occupations which require completed vocational training or no completed vocational qualification. It can therefore be understood why the vast majority of workers in temporary employment are male and the most frequent vocational qualification is vocational training in a company or at college. Moreover, many of the workers have no vocational qualification. Most of those in temporary employment were previously unemployed, but temporary work does not seem unattractive for workers who were previously employees who had to pay social insurance contributions. The largest age group is 25-40 year olds. Most temporary workers have an open-ended contract of employment and have been employed by the company for a year or more. They predominantly work in the firms in which they are placed for periods of one to six months and from six months to two years. Their placements are usually appropriate to their level of qualification.

In line with the significance of the production industry, the most frequent occupations should be classified in the industrial/technical sector, followed by support activities not defined in greater detail, the commercial sector and personal and social services. Closer investigation of the occupations reveals that there are very specialised temporary employment agencies which place workers virtually exclusively in individual lines of business, and also agencies which place workers in a broad spectrum of occupations.

The activities most frequently mentioned by temporary employment agencies are carried out in the production industry and require completion of dual training or no vocational qualification. In the industrial/technical sector, employees predominantly carry out metal-working duties, e.g. welding, turning and milling, and undertake (electrical) installation work or painting and warehouse work. The most frequent activities in the commercial field are book-keeping, administrative and secretarial duties. The most frequent support and semi-skilled work (not described in greater detail) includes working in a warehouse and using machinery. The field of personal and social

services plays a comparatively small role in temporary employment, and accordingly the agencies only specified a few activities in this field. The most frequent duties in this field, along with telephoning, are kitchen work and caring/nursing work.

Although in a third of temporary employment agencies the duties and tasks of employees change as they acquire seniority within the company, frequently leading to them taking on more demanding, independent and extensive duties, this does not appear to be the result of targeted development of skills in the temporary employment agencies. This conjecture is also supported by the fact that further vocational training of their employees only plays a relatively large role in a quarter of all companies. Overall, the findings on further training are quite contradictory.

While the companies predominantly register skills acquired while working and more rarely those acquired in the private sphere, they do not promote these skills, or do not use them in a targeted manner. Thus, within the scope of human resources development, which is implemented by only around half of the companies, the tools of documentation and recognition of skills gained are used less frequently. External activities for the placements of their employees play a role in few companies.

Further training predominantly takes place during times when employees are not placed with companies. The further training courses are clearly focused on professional content. Involvement in further training measures in companies with which employees are placed takes place very infrequently or never.

The survey of activities was an essential core component of the survey and was carried out with the objective of deriving starting points for supporting skill development in temporary employment. However, respondents displayed little readiness to answer this question. Moreover, they were imprecise and provided little detail. The reasons for this cannot be investigated definitively at this juncture. However, it is obvious that they are to be found on the one hand in the survey tool itself, which was drafted very extensively and had a large number of open questions, and thus strained the patience of or time available to respondents. On the other hand, there is also some evidence that they are to be found in the selection of respondents (units of analysis) themselves. Time pressure, lack of insight into the meaning of the question, lack of willingness to consider the matter or even pure ignorance are presumably frequent impediments to answering the question about activities. There are many points to support the supposition that respondents are actually not aware of the individual activities of their employees, or are only aware of



these individual activities to a limited extent, and that these activities are not yet an important topic for them. This confirms that targeted development of skills in temporary work is something of an exception.

Despite the somewhat unsatisfactory findings on the activities of temporary workers, this survey made it possible to gain a comprehensive overview of the structure of temporary work. The findings confirm that the development of skills is still only perceived and considered by companies to a very small extent.

### **Survey of temporary employees**

Another survey, this time of temporary workers, sought to obtain a subjective view of two threads of questioning, further training and activities. A total of 433 temporary workers were surveyed by means of a combined offline/online questionnaire by a group of researchers from the department of economic and social psychology at the Friedrich Alexander University of Erlangen-Nuremberg.

With respect to the activities carried out, clear differences were ascertained in the learning potential and personal advancement provided by the placement activities. The criteria for this to apply were the variety of the work, the exercise of influence or freedom of action, and the complexity of requirements and of workload.

Within the scope of a nationwide survey, for the first time the status quo regarding formal and informal options for competence development among temporary workers in Germany was investigated. The sample provides a good reflection of the universal set of temporary workers and can be regarded as being representative, to a very wide extent, of temporary workers in Germany.

Only a small proportion of temporary workers received formal further training provision. This was usually limited to legally prescribed safety instructions for temporary workers in the industrial sector and the metal-working and electrical sector, the provision of information material or funding additional qualifications (e.g. fork-lift truck certificate). The companies in which workers were placed tended to offer more further training than the temporary employment agencies. This further training was usually directly connected to the specific requirements of the worker's current placement, with a focus on sales training sessions, product training sessions and specific production or manufacturing processes.

A more in-depth examination of work activities on placements revealed that temporary workers are relatively unlikely to have varied work and freedom of action in the workplace. Astonishingly, however, quantitative pressure in placements was not very pronounced.

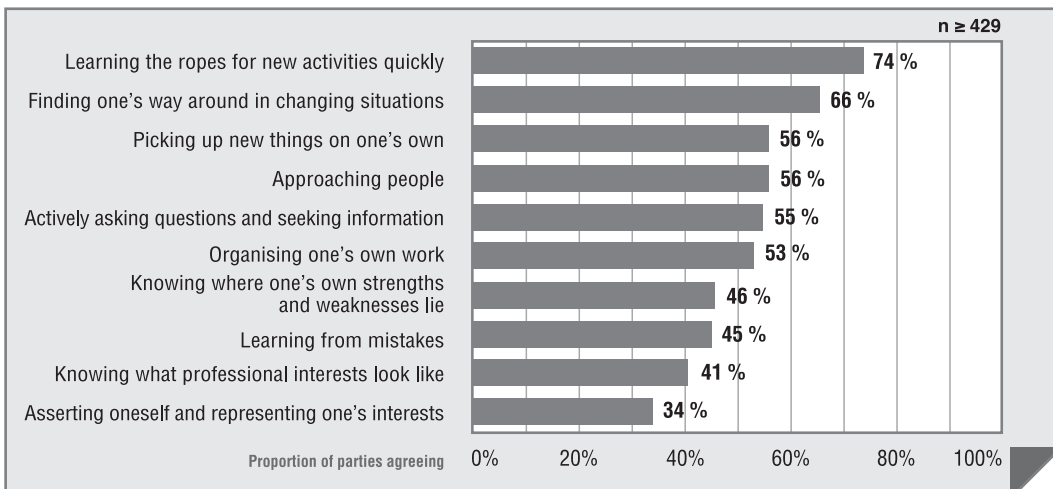
Although the work does not tend to be organised in a way which promotes learning and there is a low level of provision of formal continuing training, temporary workers consider the amount of knowledge gained within the scope of their activities to be relatively high. Even general assessments of temporary work reflect the fact that the majority of temporary workers were able to acquire or extend their capabilities through temporary work, and a large proportion of them would recommend temporary work.

From the plethora of findings, four aspects stand out in particular which emphasise the importance of the acquisition of skills for temporary workers.

*Acquisition of knowledge and learning sources*

As well as acquiring specialist skills, learning while working may also foster the development of interdisciplinary skills. The temporary workers surveyed place greater emphasis on the latter. Thus, more than 70 % of respondents believe that an important skill learned from temporary work is the ability to learn the ropes for new activities quickly, and 66 % were able to further develop their capability to find their way around in changing situations. More than half of temporary employees believe they have been able to develop further in aspects of proactive social interaction, e.g. ‘approaching people’, ‘actively asking questions and seeking information’. The following figure presents the various capabilities and the proportion in which strong further development was experienced in each case.

Figure 3. **Capabilities which it was possible to develop further by means of temporary work**



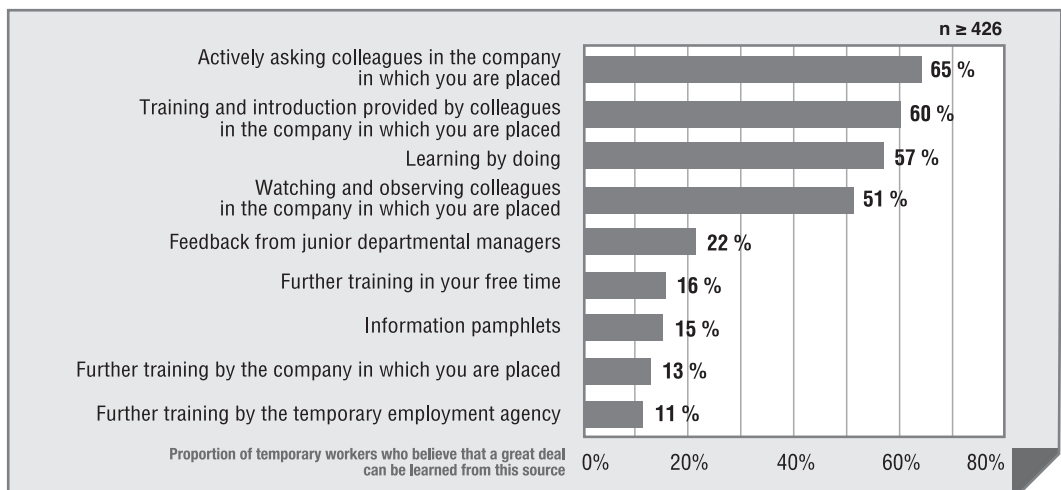
### Learning sources

In temporary work, social and methodical skills appear to play an important role in picking up and developing capabilities and skills. This is also reflected if temporary employees are asked about the relevant learning sources (see the following figure). In any case, 65 % of temporary workers state that actively asking colleagues in the company where they are placed is a central source for learning.

No subdivisions with respect to content could be distinguished, i.e. the different areas of capabilities were either closely related, and temporary workers tended to experience a high level of further training in all areas, or they experienced only a small amount of development in all areas.

Temporary employees attest that informal sources of learning are more beneficial than formal further training provided by the company in which they are placed or by the temporary employment agency. However, it must be borne in mind that only a few temporary employees were at all able to participate in formal further training. As a result, the low estimation of the learning gain from formal further training is likely to be due to the fact that there was no provision, not to the fact that the further training measures were assessed as having a low efficiency level. In particular, contact with permanent colleagues in the company in which they are placed seems to be accorded a central role in learning while in temporary employment, as is 'learning by doing'.

Figure 4. **Estimation of the learning gain from different learning sources and further training sources**



*General evaluation of temporary work by temporary workers*

If temporary workers are asked to provide a general evaluation of temporary work, 51 % are able to recommend it as a type of employment. 42 % recommend it to a limited extent, and 7 % say that from their point of view they cannot recommend this type of employment. More than half of respondents said they were able to make their capabilities more specialised or to expand them, although for 23 % there was no resultant development of capabilities, and 8 % of temporary workers assume they have lost skills during the course of temporary work (see Figure 5 below).

Figure 5, **Development of capabilities and skills during the course of temporary work**

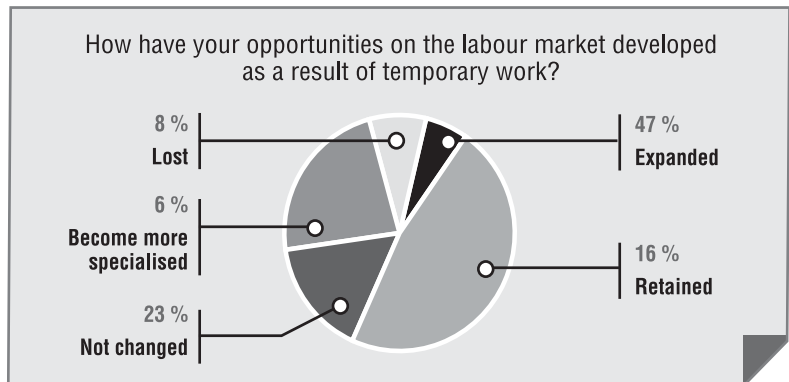
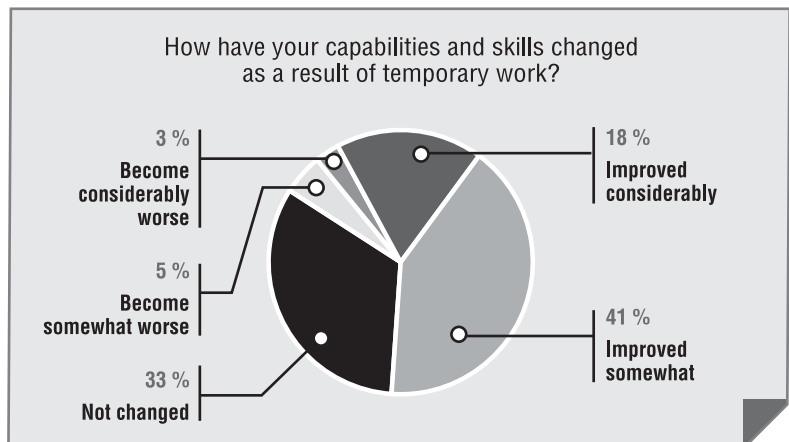


Figure 6. **Development of opportunities on the labour market**



Employability is closely connected to the development of capabilities and skills. If consideration is given to the evaluation of labour market opportunities, almost 60 % of temporary employees assume their opportunities on the labour market have improved. A third of respondents believe there has been no change in their employability, and 8 % report that their opportunities on the labour market have worsened (see figures above).

The development of skills by temporary employees appears to lie primarily in the ability to adapt to different working contexts. The workers represent 'flexible' employees who have developed strategies for finding their way around in new working contexts again and again.

## Looking to the future

It is not only in Germany that development of skills in temporary employment is an important point for discussion and organisation. In addition to formal further training opportunities, as has already been demonstrated, for temporary work in particular, opportunities to develop skills are to be found in the work itself: changing work placements open up diverse opportunities for temporary workers to develop their skills further, provided appropriate working and framework conditions exist to promote learning. Additionally, employees must be placed in such a way that they carry out activities that make it possible to develop skills.

In the future, the aspects identified in this article should be dealt with to an increased extent in the academic sphere and in practice, and plans for the development of skills should be identified. Above all, the companies in which workers are placed and temporary workers themselves should be included to a greater extent. Experiences within the framework of qualification agreements in neighbouring countries, primarily the Dutch and French examples, should have some influence on the federal approaches adopted in Germany.

The German collective wage agreements which exist to date do not provide for any further training agreements. In order to enhance learning opportunities in the expanded temporary employment market, consideration could be given to paying a certain percentage of remuneration into a further training fund. This is also recommended by the expert committee on 'Funding lifelong learning' ([www.lifelonglearning.de](http://www.lifelonglearning.de)).

However, agreement on a certain amount of money does not achieve anything by itself. This is demonstrated by the example of

the Netherlands. Rather, supportive measures for the parties involved must be agreed and at the same time models to stimulate involvement and the execution of competence development must be implemented.

The findings of the various surveys undertaken within the scope of the BIBB research project clearly identify the potential of temporary work, particularly for competence development in the workplace. Since the research project was an exploratory study, it is not possible to make any specific recommendations for action at this juncture. However, it was possible to demonstrate that the informally acquired skills and the associated recording, validation and certification should in future be taken up to a greater extent within research work and in practice by means of corresponding model projects. Future research and action requirements can be demonstrated, by way of example, using the following research questions: Which specific tools for recording and evaluating skills are suitable for use in temporary work? How can temporary workers be placed in temporary positions in future with greater regard to the issue of developing skills? How can future qualification work be organised by the temporary employment agencies? How can companies in which workers are placed be involved in the qualification work to a greater extent and how can cooperation between companies in which workers are placed and temporary employment agencies be organised with respect to the development of skills? How can models of formally organised competence development (e.g. in the form of further training courses) be linked more strongly to the informal development of skills in work? To what extent is anchoring further training, legally or in terms of collective wage agreements, possibly in a manner linked to a fund, as is the case in France and the Netherlands, also sensible and achievable in Germany?

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# International organisations and the evaluation of education systems: a critical comparative analysis

**Claudia Neves**

Researcher in the Unidade de Investigação Educação e Desenvolvimento (UIED)  
[Research, Education and Development Unit] – Faculty of Science and Technology,  
Universidade Nova, Lisbon

## **Keywords**

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sustainable development,  
indicators,  
personal development,  
education and  
training evaluation

## **SUMMARY**

**This article seeks to develop research involving a macro-level critical comparative analysis of reference documents produced by international organisations (UNDP, OECD, UNESCO, the World Bank and the European Union) which guide world education policy decisions. The primary objective was to consider the key guidelines currently defined for education in terms of major millennium goals.**

**In other words, to what extent do education policy evaluation and monitoring indicators incorporate the new paradigm of lifelong learning as a human development model, and meet the millennium development goals in a context of globalisation?**

## Introduction

This research starts from the assumption that education systems and policies are closely connected to sectors of social and political life, and pursue objectives related to a political philosophy and the development strategy arising from that philosophy.

The purpose of this study was to develop a macro-level critical comparative analysis of reference documents produced by international organisations (UNDP, OECD, UNESCO, the World Bank and the European Union) which guide education policy decisions. The primary objective was to consider the key guidelines currently defined for education in terms of major millennium goals.

In other words, to what extent do indicators for education policy evaluation and monitoring incorporate the new paradigm of lifelong learning as a human development model, and meet the millennium goals for education in a context of globalisation?

## Relevance of the study and methodology

Since the Rio World Summit (2001) on Sustainable Development in particular and the Johannesburg World Summit (2003), the need has arisen for a global understanding of balanced growth, the essential pillar of which is sustained human development through the progress of humankind and its abilities. This is a global project in which both governments and the public must be actively involved and in which each person will have shared responsibilities in the development process (Human Development Report – UNDP: 2002). This issue has philosophical, political, sociological and educational implications that go beyond the classical economic models, and which suggest that the relationship between education and development will have to be addressed in a new light. Many of these changes are conceptual, structural and theoretical, and call for fresh reflection on education and development.

Questions were accordingly raised on the coherence or otherwise of short and long-term policy strategies reflected in goals and objectives, accompanied by evaluation tools and a new philosophy of education focusing on sustained human development.

The aim was therefore to identify the principal international organisations with concerns in the field of education and training in order to identify the main global sources for formulating national education policies.

The organisations selected were the United Nations (UNDP and UNESCO), the OECD and the World Bank. The research field was subsequently broadened to the European context, since the European Union has become an important reference institution for the education and training policies of its Member States.

The information collected was compiled and subsequently organised into a reading grid based on a content analysis to allow a comparative and critical reading. This involved correlating a number of issues arising out of the theoretical framework and the ideological and political thinking underpinning the documentary sources analysed and the research issues defined beforehand.

## A new world awareness of development

The United Nations has been discussing and reflecting on the world's economic imbalances since the 1960s. In the 1990s, however, the political, economic, social and cultural climate led the UN to promote a series of summits and meetings on the far-reaching changes affecting societies. This led to greater global awareness, reflected in several experts' reports which sought to reconcile the objectives of economic gain with social development.

Development nowadays is taken to mean enhancing the quality of life and the environment by improving education, training and health systems while ensuring freedom and social justice.

The international community undertook to broaden the view of development based on the ideal of human development as the key to sustained social and economic progress in all countries. The millennium development goals were accordingly defined <sup>(1)</sup> as a reference framework for measuring the progress of development in the world.

According to these goals, people must have decent living conditions to be able to develop their own potential and to act jointly and responsibly in the development of societies.

The goals are underpinned by the paradigm of human development as a fundamental strand of the development models of societies, which must be sustainable in the short and long term.

In the 1990s, the UNDP (United Nations Development Programme) conceived the concept of *human development* with the creation of the Human Development Index. Most of the world's governments adhered to this concept, calling for the building of structures to

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<sup>(1)</sup> For further information on the process of setting the international development goals, see [www.paris21.org/betterworld](http://www.paris21.org/betterworld)

eradicate poverty for the sake of human dignity. Nowadays the human development paradigm involves a development strategy based on human abilities in social systems with free and fair access to opportunities so as to balance the economic growth of societies and share their gains and costs on an equitable basis (Human Development Report, 2003).

For Ambrósio (2003), human development must be the ultimate aim of all policies that contribute towards dignity and human resource capacity building in line with the values of global ethics.

The Nobel Prize winner for economics, Amartya Sen, similarly argues that personal freedom is the basic goal and most effective means of achieving economic sustainability and combating poverty and insecurity. For Sen, freedom and development interact on a reciprocal basis, as he takes freedom to be synonymous with development and sees development as freedom. For Sen, therefore, free and sustained action is an essential engine of development (Sen, 2003, p. 31).

According to the millennium development goals and the human development paradigm, education and training are considered to be the privileged social environment for enhancing personal specificities and understanding the individuality of other people, the advantages of lifelong education being flexibility, diversity and availability at different times and in different places (UNESCO, 1996, p. 17). We are therefore involved in a continuous process of education, training and self-improvement which enhances our knowledge and aptitudes.

More humanised thinking on education therefore emerges which seeks to establish new aims and objectives for education and training, placing greater emphasis on the process of cultivating the human being per se.

## Education and training evaluation at world level

Organisations such as the OECD, UNESCO, the World Bank and the European Union systematically produce international statistics that bring together a range of indicators relating to the piloting of reforms, thus making it possible *'to identify changes in quality and results; draw attention to aspects that must be improved; evaluate the impact of the effort of the system; develop initiatives in relation to other countries or political organisations; catalyse new ideas'*. (Amaro, 2002. p. 316).

Education indicators are policy guidance tools that most industrialised countries have had for around 20 years. They were originally needed to justify education costs, and are now used as an information source applied to the evaluation, planning and administration of education and training.

Education indicators are designed to give information to policy-makers about the state of education systems to facilitate their analysis and evaluation so that questions can be raised in relation to old and new policy considerations (Nuttall, 1994, p 89).

As Gilbert Landsheere says (1994): *'piloter un système éducatif, c'est plus qu'accumuler des indicateurs. Le pilotage doit nécessairement comporter trois composants: la collecte régulière d'informations et évaluations de ces informations et leur traduction en actions institutionnelles'* [piloting an education system involves more than accumulating indicators. Piloting must involve three components: the regular collection of information and evaluations of such information, and its translation into institutional action] (p. 12).

Since ever greater political and social pressure is being brought to bear for education and training performance data to be publicised with a view to ensuring a certain accountability <sup>(2)</sup>, it has become necessary to ensure value for money by creating the social conditions for implementing accountability mechanisms (Afonso, 1998, p. 66).

This is connected to society's growing dissatisfaction with education systems, which have not produced the outcomes expected in terms of equal opportunities in access and social mobility for the most underprivileged sectors.

Researchers have begun to focus on analysing the possible short-sightedness of educational goals and how they fit into the human development process, which presupposes *'not only cognitive development, but also the integration and converging and complete development of the multiple dimensions forming the human personality and identity'* (Sá-Chaves, 2003, p. 63).

Along similar lines, Nuttall (1994) also asserts that the criteria for choosing, developing and evaluating education indicators differ according to the political interests and political context in which the education system functions.

Referring to this approach in which the State starts to adopt a managerial role leading to the formulation of monitoring and accountability mechanisms that include evaluation, Almerindo Janela Afonso

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<sup>(2)</sup> Accountability is taken to mean the fact that resource use effectiveness must be verified in order to optimise and improve outcomes.

states that the adoption of such policies has led to a positivist evaluation theory, and to evaluation based on measurable indicators, reflecting a greater concern for product rather than process. For Afonso, evaluation was a way of introducing a market logic into the sphere of the state and public administration (1998, p. 75).

In other words, the findings of indicator-based international studies may be limited due to their macro outlook, which excludes contextual details that influence education and training outcomes.

In this context Nuttall (1992, p.14) states that an education indicator provides information about the behaviour of an education system, and may provide policy-makers with an overview of current conditions in education, given the complexity of the systems involved. The information conveyed by the indicators will always be limited, however, hence the need for them to satisfy a number of substantive and technical criteria. To compensate for the unidimensional nature of each indicator, a set of indicators must be built that together provide a valid representation of the condition of a particular education system.

## Monitoring education in the European Union

The European Union's principal characteristic is its Member States' linguistic and cultural diversity. As a result, education systems tend to be isolated from each other to some extent, with different rules applying to each system. For individuals to benefit from this diversity, Member States clearly need to develop more cooperation and mobility in education and training. The EU has therefore been working on this field over the last 20 years.

Each Member State is responsible for the content, curricula and organisation of education systems. The principle of 'subsidiarity' gives the EU as an institution the capacity to support and supplement each Member State's action in particular areas of education and training <sup>(3)</sup>.

This type of cooperation has been promoted since the Lisbon European Council in March 2000, which represented a milestone in the process leading to the adoption of the work programme on future EU education and training goals.

First, the European Commission drew up a draft report negotiated by the Member States on the concrete future objectives of education systems. The European Council subsequently adopted a final

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<sup>(3)</sup> These areas are established in Articles 149 and 150 of the Treaty.

report presented at the Stockholm European Council in March 2001, which established three strategic objectives (COM(2001) 59 final):

- improving the effectiveness of education systems in the EU;
- facilitating the access of all to education systems;
- opening up education systems to the wider world.

This report was therefore the first official document defining an approach to EU education and training policies. The detailed work programme on the concrete future objectives of education systems in the European Union was adopted on 14 February 2002.

These objectives mark the beginning of a new stage of education and training development in the EU, based on respect for systems which are different but which share common objectives that form the basis for reforms in the various countries and for EU-wide action.

The indicators and benchmarks are also fundamental to the implementation of the Open Method of Coordination and to the success of the Lisbon Strategy, because countries need valid and comparable data to be able to compare their progress against the objectives to be achieved by 2010.

In Brussels in March 2003, the European Council called explicitly for using indicators and benchmarks <sup>(4)</sup> to identify best practice and to ensure efficient investment in human resources (*Commission staff working paper: Progress towards the common objectives in education and training. indicators and benchmarks*, 2004, p. 9).

Indicators are therefore used to measure progress in relation to the objectives proposed for education systems, while benchmarks are intended to act as reference points, emphasising the additional effort necessary for improving education systems.

The European Commission, however, has stressed that indicators should not be viewed in terms of measuring progress alone. They should also be seen as a basis for establishing dialogue and exchanges between Member States and as a tool for understanding the reasons for differences in performance, so that some countries can learn from the best practice of others. The use of indicators for exchanging best practices and new policy approaches in the EU is even more relevant in that many Member States are now achieving outstanding performance, while others are facing great challenges in achieving the objectives defined.

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<sup>(4)</sup> According to the Communication from the Commission on 'European benchmarks for education and training: follow-up to the Lisbon European Council', COM 629 Final, the benchmarks are taken to be defined with reference to concrete objectives on the basis of which it is possible to measure the progress achieved.



## Evidence of the practice of evaluation of the international organisations

To be able to verify the coherence or otherwise of the objectives proposed for education and training in terms of human development and the indicators that monitor its progress, a critical comparative analysis has been developed on a range of world education policy evaluation and monitoring documents published by international organisations. The research sought to establish a link between the concepts embodied in the theory and the evidence of practice.

The international organisations and documents analysed were: OECD (*Education at a Glance*), UNESCO (World Education Report), World Bank (Education Sector Strategy), European Union (*Progress towards the Common Objectives in Education and Training: Indicators and Benchmarks*), United Nations (Millennium Development Goals) and the United Nations Development Programme – UNDP (Human Development Report).

To analyse the content of these documents a series of thematic categories was established that would allow the practice of education policy evaluation and monitoring carried out by the various international organisations to be compared.

In line with the summary table presented below, some of the conclusions of the comparative analysis are then presented, organised according to the thematic categories established, so as to highlight the coherence between education and training monitoring and the objectives defined for education and training in the millennium development goals and in the area of human development.

### **Personal development and social well-being**

It was immediately noted in relation to *personal development and social well-being* that there are no indicators for monitoring *citizenship skills* and *accountability for the quality of the environment*.

As regards *mobility and exchanges*, arising out of the growing openness of societies to the global community through broader citizenship, the international organisations do not yet all appear to attach the same importance to this issue. Only the OECD and the EU establish indicators for monitoring mobility and exchanges. The OECD focuses more on student mobility in tertiary education, while the EU evaluates not only student but also teacher mobility. Due to its economic and political nature, the EU is clearly increasingly concerned with student and teacher mobility and exchanges, which it measures on the basis of data from the various European mobility and exchange programmes. No indicators from the other international

**Table 1. Comparative table of the number of indicators attributed to each category of analysis, by organisation**

CATEGORIES AND SUBCATEGORIES		OECD	UNESCO	WB	UE
Personal development and social well-being	Accountability skills for the quality and preservation of the environment				
	Citizenship skills				
	Mobility and exchanges	1			4
	Socioeconomic context		8	1	1
Quality of the education and training and professional path	Basic skills	5	2		4
	Skills for the knowledge society		5	1	2
	Awareness raising as regards scientific areas	2			4
	Teachers	5			
	Learning	4	1	2	1
	Employability and economic profitability	5			
	Continuing learning of professional skills				3
	Effectiveness of educational institutions	6	15	8	3
Equal opportunities	Gender balance	1	4	2	
	Respect for sociocultural and religious diversity				
	Recognition of skills and learning in non-formal contexts				
	LL opportunities for all				4
Resource optimisation	Financial	4	5	1	2
	Human	2	3		2
	Physical				

WB = World Bank

organisations were identified on education policy development in terms of the provision of more and better conditions of mobility in both educational and professional contexts.

A way of evaluating access to social well-being is to examine the distribution of the wealth generated by society. This is because wealth distribution is generally considered to be a good indicator for evaluating the capacity to fund the goods necessary to ensure a life of adequate quality. In terms of education for personal development

and social well-being, it is therefore important for the international organisations to characterise the *demographic and economic context* of societies. UNESCO, the EU and the World Bank compile indicators relating to these aspects. UNESCO compiles a number of indicators that allow it to evaluate demographic trends and economic dependency relationships. The EU has developed demographic indicators that allow it to evaluate the number of young people as a percentage of the total population, identifying the population of formal education age. The World Bank only evaluates per capita GNP, providing an idea of the level of distribution of GNP per inhabitant.

### **The quality of education and training and the career path**

The first step in evaluating the quality of education and training was to highlight the *basic skills* each individual must have to be able to carry out their day-to-day activities. The analysis shows that all the organisations except for the World Bank compile indicators referring to basic skills. The OECD compiles indicators on reading and literacy skills and on the reading habits of 15-year-old pupils.

Literacy is also still an important issue for many of the world's countries. UNESCO, the UNDP and the United Nations therefore address this basic skills issue by evaluating youth and adult literacy rates. UNESCO compiles estimates of the number of illiterate adults, while the UNDP and the United Nations (by monitoring the millennium development goals) have compiled youth and adult literacy rates. The EU makes an evaluation based on average performance percentages and distributions as regards students' results.

For the international organisations studied, the concept of basic skills represents an observable type of behaviour that emphasises the outcome or final product.

In terms of *skills for the knowledge society*, a series of indicators encompassing various areas of knowledge were brought together.

UNESCO evaluates access to the principal means of information and communication, such as daily newspapers, radio and television, telephone, computers and the Internet, as a way of monitoring access to and the use of the respective new information and communication technologies. The World Bank presents a single indicator relating to the estimated adult literacy rate. The EU stands out again for the type of indicators defined. Its political and economic nature means that it must evaluate aspects of importance for the knowledge society, and it has therefore created a set of indicators relating to foreign language learning. The lack of another type of indicators, however, is clear. In terms of millennium development goals and human development, skills for the knowledge society are eval-

uated by means of statistics relating to the number of people with access to communication and information resources. The UNDP focuses on the number of fixed and mobile telephone subscribers, while the UN also considers the number of personal computer and Internet users.

Another important aspect for the quality of education and training in the context of the knowledge society is *raising young people's awareness of scientific areas* as a way of responding to competitive needs. In rating this aspect, only the OECD, the EU and the UNDP show a concern for 'measuring' progress to achieve this strategic objective. The OECD outlines tertiary qualifications and students by area of study, thus providing an idea of the areas in which students make their choices. The EU evaluates the number of students enrolled on mathematics, science and technology courses, and the number of graduates in these subjects. The UNDP has produced an indicator for analysing the number of students enrolled in these subjects as a percentage of the total number of higher education students. This analysis highlights the lack of indicators for monitoring education strategies that include the use of scientific language, by interpreting a variety of information sources, analysing and setting out ideas underpinned by the new information and communication technologies.

*Teacher training* is generally considered to be a powerful tool for offering high-quality teaching. Only OECD data were found in this area. The OECD provides an overview of the professional situation of teachers in terms of professional development, pay, working time, supply and demand and the distribution of teachers and other education personnel by age and gender. The other international organisations do not compile indicators for monitoring teaching staff activity.

The issue of *learning* is another important aspect in international discussion and reflection on the new requirements for the knowledge society. In this area, the international organisations place great emphasis on evaluating classroom organisation. The OECD provides indicators that 'measure' the number of training hours scheduled for primary and secondary education, and the teacher/pupil ratio. This organisation nevertheless adds indicators which are highly relevant to this issue which monitor the learning process of 15-year-olds, and evaluate the use of NICT as a learning tool by pupils and teachers. UNESCO, the World Bank and the EU also evaluate the learning environment in terms of the number of pupils per teacher, although the World Bank and the EU do so by level of education. In other words, the type of evaluation carried out does not cover new learning

methods and strategies. Only the OECD stands out for the importance it attaches to autonomy in learning, which is fundamental for consolidating lifelong learning skills, and the use of NICT as a learning tool in schools.

The OECD alone focuses on the *results of educational institutions*, defining an indicator for comparing student performance across institutions. This type of indicator allows the countries themselves to establish rankings of the various educational institutions based on student results. In the present context, this indicator seems to be skewed, since it evaluates the quality of educational institutions solely on the basis of exam results.

Along the same lines as the previous subcategory, *employability and the economic profitability* of education is one of the concerns of the OECD, which has compiled a set of 'measurements' to evaluate the number of years young people spend in education, employment and non-employment. The OECD evaluates the situation of young people in terms of training and employment, and the situation of young people with low levels of education. In terms of income, the OECD has an indicator for comparing the level of education to the level of income, and the links between human capital and economic growth.

*Work-based learning* is addressed only by the EU, which evaluates company expenditure on vocational training courses and the hours allotted for workers to attend such courses.

The *effectiveness of education systems* is an area of concern for various world governments. The organisations studied compile indicators on rates of access to education, participation and progression, and on the number of early school leavers. The OECD has produced an indicator to measure estimates of schooling and the percentage of pupils enrolled. In terms of access to education, participation and progression, the OECD evaluates the working population's participation by level of education, and rates of access to education, participation and completion in secondary education. It also evaluates the level of education of the adult population.

UNESCO brings together a huge number of indicators enabling rates of access to the various levels of education to be compared to the school-age population, and indicators to evaluate the gross and net enrolment rate in the various levels of education.

The World Bank considers gross and net enrolment rates in the various levels of education, school life expectancy and progression to secondary education. It also considers the number of enrolments in tertiary education, and the number of enrolments in private education at primary and secondary level.

The EU analyses the situation of 22-year-olds who have completed secondary education. It also has an indicator to monitor the percentage of enrolments in primary private education.

The UNDP has compiled indicators to measure universal primary education (one of the principal development goals), presenting indicators on the number of children who reach the fifth year and net primary and secondary education enrolment rates.

To monitor progress in education in terms of the millennium development goals, the United Nations also shares the goal of universal access to primary education, defining indicators to evaluate the proportion of pupils who reach the fifth year and the net school enrolment rate in primary education.

### **Equal opportunities**

The first clarification in the area of equal opportunities shows that the international organisations do not present any indicators evaluating the extent to which education respects sociocultural and religious diversity, i.e. evaluating ethnic and religious minority access to education and training. There are also no indicators on the recognition of skills and learning acquired in non-formal contexts. This could indicate a strong tendency towards social exclusion in relation to people who have not had access to formal education for various reasons.

All the international organisations show considerable concern for gender issues, though some attach more weight than others to this aspect. The OECD evaluates gender differences in relation to student performance alone. UNESCO examines permanent teaching staff and the percentages of female pupils in each ISCED level. It also evaluates the percentage of female pupils for each area of study, and the percentage of female teachers in pre-primary, primary and secondary education. In terms of the gender balance among pupils, UNESCO only analyses tertiary education. The World Bank compiles indicators that 'measure' the percentage of girls in total primary and secondary education enrolments. In evaluating progress in relation to the millennium development goals, the United Nations also shows a concern for gender inequality in education. The indicators defined identify the ratio between girls and boys in primary, secondary and higher education. They also identify the ratio between male and female literacy. The gender balance is also evaluated by the United Nations in other areas, such as political participation and professional activities, but this has been disregarded since it is not connected to education. The Human Development Reports bear witness to considerable concern for gender inequalities, evaluating them in

various areas of human activity, though this research only covers those relating to education. The UNDP presents indicators on the adult female literacy rate, the young female literacy rate, the net female primary and secondary education enrolment rate, and the gross female higher education enrolment rate.

Also within the area of equal opportunities, the international organisations' evaluation of opportunities for access to lifelong learning has also been analysed. Indicators in this area are only available from the EU, which evaluates the percentage of adults who take part in education or training of some sort for each level of education. This indicator is useful for 'measuring' the number of people who take advantage of lifelong learning. The EU also has indicators for monitoring rates of participation in education and training by age and level of education, and for evaluating the proportion of young people who have only completed secondary education and who do not take part in the education system.

### **Resource optimisation**

Political and ideological theory considers the equitable use of resources in education to be essential for ensuring an acceptable level of quality. An analysis of the resource indicators as a whole shows that the international institutions focus mainly on evaluating whether the best use is made of financial resources, probably due to the increasing need for societies to account for the use of budget appropriations (accountability).

Virtually all the institutions evaluate the percentage of public expenditure allotted to education and training, establishing comparisons between the latter and total public expenditure.

The OECD evaluates the proportions of public and private investment in educational institutions, and total public expenditure on education. It also evaluates expenditure on institutions by resource category, comparing such expenditure to GDP. In terms of financial resources in education, UNESCO focuses on public expenditure on education in relation to GNP, and as a percentage of state expenditure. UNESCO has an indicator for tracking the average annual growth of public expenditure on education. It also establishes indicators to evaluate current expenditure as a percentage of total public expenditure on education, and the division of current expenditure by level of education. The World Bank only defines one indicator, which shows the percentage of public expenditure on education in relation to GDP. The EU is not very different from the other organisations. It compiles indicators that evaluate public expenditure on education as a percentage of GDP, and private expenditure

on educational institutions as a percentage of GDP. The UNDP makes the same type of evaluation, but distinguishes between public expenditure by level of education.

In terms of human resources, a decrease is evident in the number of monitoring indicators. Once again the primary concern is to evaluate the allocation of financial resources to pupils and teachers – the human component of education. The OECD defines an indicator for monitoring public expenditure on students and families. UNESCO evaluates teaching staff remuneration as a percentage of current expenditure, expenditure per pupil as a percentage of per capita GNP, and the number of staff in private education as a percentage of the total number of staff. The EU measures total expenditure per pupil and per level of education, relating this expenditure to per capita GDP.

In conclusion, most international organisations appear to evaluate resources invested in education, favouring the financial component to the detriment of the human component.

## Conclusions

This empirical study on the evaluation international organisations carry out through their major statistical reports confirms the discrepancy that exists between the objectives defined for education and training in terms of millennium development goals and the respective monitoring indicators.

The evaluation carried out in these reports primarily reflects a positivist and technological view of education, formulated on the basis of measurable descriptors and indicators. The findings of these international comparative studies are limited in relation to the notion of education underlying the millennium development goals which is needed to ensure autonomy and citizenship.

The factors linked to the context in which education is processed, the development of that process and the respective social interdependencies, which have a huge influence on educational processes and outcomes, have therefore been avoided.

The vast majority of the indicators focus on results, access, resources and organisational and administrative aspects, overlooking significant dimensions that determine the quality of education and training, learning processes and personal development. In this way they contribute to linear and restrictive interpretations of highly complex formal and non-formal education processes (Ambrósio, 2003, p. 23-32).



It is therefore postulated that the evaluation models applied by these international organisations may not help to improve the quality of education or promote policies designed to achieve equity and economic and social justice, or citizenship for democratic accountability, and may actually lead towards a loss of critical thinking within a performance culture.

It is, however, important to contribute to the effort being made (van Zanten, 2004) to improve the construction of these indicators and the modelling of education processes and systems (Le Moigne, 1999).

What is at issue is neither the desirable culture of evaluation nor the establishment of benchmarks for coordinating policies, but the development of a framework of comprehensibility enabling evaluation procedures to be developed by connecting *policy* (reference frameworks, aims, objectives) to *politics* (implementation of programmes with a view to achieving time-bound goals).

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# Trainers' beliefs about knowledge and learning – A pilot study

## Sarah Müller

A graduate in business education and a member of the academic staff in the field of Occupational and Business Education at the Carl von Ossietzky University of Oldenburg

## Dr Karin Rebmann

Professor of Occupational and Business Education at the Institute for Business Administration and Business Education at the Carl von Ossietzky University of Oldenburg

## Elisabeth Liebsch

A graduate in business education with a scholarship from the Anna Magull Foundation at the Carl von Ossietzky University of Oldenburg.

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Pilot project, tacit knowledge, training personnel, training research, vocational qualification, working experience

### SUMMARY

**Epistemological beliefs are personal beliefs about knowledge and the acquisition of knowledge. As subjective theories about knowledge and learning, they have the function of directing and controlling actions and are, therefore, highly relevant to teaching and learning processes. Numerous empirical studies focus on the epistemological beliefs of students; the beliefs of teachers and business training personnel have so far been neglected. This contribution presents the results of a pilot study conducted with 52 business trainers. Using a questionnaire (*Epistemic Belief Inventory*), epistemological beliefs were recorded and evaluated by factor analysis. Four dimensions of knowledge and learning could be empirically demonstrated: speed and control of learning processes and source and structure/certainty of knowledge. The degree of markedness or development of the dimensions is generally in the mean area. However, significant differences can be demonstrated between people at the start of their careers and older trainers.**

## Introduction

Since the mid 1950s, empirical studies have dealt with the subject of epistemological beliefs. The terms used in English-language works, such as personal epistemology, epistemological beliefs or theories, ways of knowing or epistemic cognition, can be defined as 'individuals' beliefs about the nature of knowledge and the processes of knowing' (Hofer and Pintrich, 1997, p. 117). As far as semantics is concerned, the term 'epistemological belief' is inextricably linked with the term 'knowledge' or 'cognition' (Greek *ἐπιστήμη*). It concerns the nature of knowledge and the subjective criteria for the truth of knowledge. The individual is faced with an epistemic problem, when he asks himself: How can I say that I know something when even experts cannot agree on it? Are the opinions of experts better than my own opinions? Can I ever know something with absolute certainty?

Epistemological beliefs are, therefore, always personal and consequently also subjective. This raises the question of the connection with subjective theories. Subjective theories can be considered as a person's set of assumptions, motives, suppositions, ideas and cognitions related to his view of himself and the world (Christmann, Groeben and Schreier, 1999, p. 138). Behind this lies the idea that each individual develops psychological knowledge and assumptions about, and has experience of, how other people act, what they perceive, think, feel and intend to do, why they do it and what the consequences will be (Dann, 1994). Whereas subjective theories are general systems of belief, epistemological beliefs relate to specific beliefs, i.e. about knowledge and the acquisition of knowledge. They include a student's basic assumptions about 'the criteria for knowledge and learning, the limits of learning, the degree of certainty provided by a certain level of knowledge and how learning and the acquisition of knowledge function in general' (Drechsel, 2001, p. 40).

These personal beliefs or assumptions about knowledge and the acquisition of knowledge have a direct influence on understanding, problem-solving, learning and behaviour (Hofer and Pintrich, 2002; Schommer, 1994a; Dann, 1994; Groeben et al., 1988). However, the individual is not necessarily aware of them. Furthermore, empirical and theoretical works about epistemological beliefs point out that these beliefs are subject to a process of development. In doing so, it is assumed that this process is influenced by personal experience, enculturation, upbringing and schooling (Anderson, 1984; Jehng, Johnson and Anderson, 1993; King et al., 1983; Pratt, 1992; Schommer,

1993a). Examination of subjective theories suggests that formal education and professional socialisation contribute to the development of these theories (Dann, 1994; Füglistner et al., 1983). At the start of the development process, the individual has a dualistic opinion, a black-and-white view of the world (Perry, 1999, p. 10, p. 66 et seq.; Schommer, 1994a, p. 26 et seq.). Knowledge is seen as right or wrong and authority figures know the answers. In the course of development, the individual notices that there are even conflicts of opinion between authority figures. In the search for the one right answer, he discovers that there are various points of view (diversity) and that each belief can be supported. His own opinion is no longer of lesser value, but just as valid and worth supporting as other opinions. Later, the individual realises that knowledge must always be seen in context (relativism). A highly sophisticated position has been attained in the well-advanced process of development when you realise that there are many possibilities with regard to knowledge and that you have to actively decide on one.

### **Meaning of epistemological beliefs in the professional work of teachers**

Knowledge about students' epistemological beliefs gives teachers the chance to gain an insight into their learning processes and motivation (see Buehl and Alexander, 2001, p. 385). Consequently, students' epistemological beliefs give teachers an important starting point to encourage their pupils and trainees to learn – both at school and at work (Köller, Baumert and Neubrand, 2000).

But for the professional work of teachers it is not only the students' epistemological beliefs which should be taken into account but also the epistemological beliefs of the teachers themselves. Students experience all aspects of the teachers' teaching concepts; learning is not only influenced by these personal beliefs but also by the teaching and learning methods used (see Pratt, 1992, p. 217). Various empirical studies conclude that there is a connection between the personal beliefs of a teacher and his or her teaching approach. It is assumed that the teachers' epistemological beliefs – often unconscious – control their actions in lessons or in business training situations. Thus, they form a 'didactic frame of reference' which influences teaching decisions and therefore shapes the course of the lesson or training session (Helmke, 2003, p. 52).

It can be established that research into teachers' epistemological beliefs is important not only to understand the students but also to enable the teachers to help their students (see Schommer-Aikins, 2002, p. 108). To teach effectively, it is necessary to have an in-depth

understanding of the factors promoting the learning process. This includes knowledge of personal beliefs about knowledge and learning (see Boulton-Lewis, 1994, p. 387 et seq.). Nevertheless, there are very few studies on the epistemological beliefs of teachers (e.g. see Seifried 2006 on subjective theories of business teachers). In particular, training personnel have so far been completely neglected. Furthermore, if we consider that the concept of epistemological beliefs changes over time this gives rise to another question, which is given hardly any consideration in research: the changes experienced by teachers with increasing professional socialisation.

## Theories and models concerning epistemological beliefs

Most of the available theories and models concerning epistemological beliefs concur with the description of epistemological beliefs as subjective concepts about knowledge and the acquisition of knowledge. Taken together, they assume that peoples' beliefs change and become more complex over the course of time. However, apart from this basic consensus, there are significant differences in the description of the construct. The theories can be differentiated according to whether they are based on domain-specific or domain-general beliefs and whether they are based on a one-dimensional or multi-dimensional model.

### **Domain-specific vs. domain-general models**

With regard to the domain specificity of epistemological beliefs, various positions can be identified: one hypothesis states that epistemological beliefs are completely or largely independent of knowledge domains (Moore, 2002; Perry, 1970; Schommer-Aikins, 2002). Another hypothesis assumes that there is a domain specificity according to which individuals in different domains or specialist areas may have different epistemological beliefs (Hofer and Pintrich, 1997). Another view, which has hardly been researched yet, is that there is a core area of domain-general beliefs which are complemented by domain-specific beliefs (Trautwein, Lüdtke and Beyer, 2004). Depending on the knowledge domain, various dimensions of epistemological belief can be activated (Hammer and Elby, 2002).

More recent empirical studies put forward the hypothesis that individuals not only have general, i.e. domain-general, epistemological beliefs but also domain-specific beliefs (Buehl, Alexander and

Murphy, 2002; de Corte, Op't Eynde and Verschaffel, 2002; Trautwein, Lüdtke and Beyer, 2004). However, it is not yet clear how these assumed different levels interact with each other (Hofer, 2000).

### **One-dimensional vs. multidimensional models**

The so-called one-dimensional models are based on typical stages of development. Higher stages of development can be characterised by increasing sophistication and more complex ideas. Whereas the one-dimensional models assume that epistemological beliefs are one-dimensional (Baxter Magolda, 2002; Belenky et al., 1997; Boyes and Chandler, 1992; King and Kitchener, 2002; Perry, 1970), the multidimensional models assume that epistemological beliefs can be divided into several dimensions and that the markedness in the individual dimensions can develop independently of each other. This means that changes in one dimension are not necessarily accompanied by changes in other dimensions (Jehng, Johnson and Anderson, 1993; Kuhn, 1991; Pintrich, 2002; Schommer, 1994a, 1994b; Schraw, Bendixen and Dunkle, 2002). They also assume (e.g. in contrast to Perry) that there can be recursive developments in one or even all dimensions which are not aimed at a particular final development (Schommer-Aikins, 2002, p. 110 et seq.). Current studies suggest a multidimensional structure of epistemological beliefs (Buehl and Alexander, 2006; Conley et al., 2004; Hofer, 2004; Schommer-Aikins and Easter, 2006).

A well-researched, empirical, multidimensional concept is available from Schommer (1990, 1994a, 1994b; Schommer-Aikins, 2002). Her concept of epistemological beliefs consists of five dimensions concerning the nature of knowledge and the acquisition of knowledge. These dimensions are referred to as (1) source, (2) certainty and (3) structure of knowledge and (4) control and (5) speed of knowledge acquisition. In her model, Schommer presents the direct inter-relatedness of knowledge and knowledge acquisition. Dimensions 1 to 3 concern the nature of knowledge, Dimensions 4 and 5 concern the learning process.

Each of these dimensions is taken to be a continuum from an extremely naive to a sophisticated, i.e. well-developed, belief and this continuum is used to illustrate the assumed process of development (Duell and Schommer-Aikins, 2001; Schommer, 1990, 1993b, 1994b). Therefore, Dimension (4), control of learning processes, is seen as a continuum from 'the ability to learn is fixed at birth' to 'the ability to learn is acquired through experience'. Dimension (5), speed of knowledge acquisition, extends from the naive view that 'learning is a process which succeeds on an ad hoc



basis or not at all' to the sophisticated view that 'learning is a gradual process'. The extreme positions of the continuum of Dimension (3), structure of knowledge, which are also presented as a naive position on the one hand and a sophisticated position on the other, can be formulated as follows: 'Knowledge is simply structured and consists of isolated components' and 'Knowledge is complex and interrelated'. Dimension (2), certainty of knowledge, has a continuum from 'Knowledge is absolute and stable over time' to 'Knowledge is subject to a constant process of development'. Although Dimension (1), source of knowledge, could not be empirically demonstrated by Schommer, a continuum was defined extending from the naive view 'there is one omniscient authority to impart knowledge' to the sophisticated position 'Knowledge is acquired through subjective and objective experience'.

## Empirical study

### Questions

Research into teaching and learning has, in recent years, become more focused on the concept of epistemological beliefs and has revealed connections with scholastic and academic learning. Whereas intensive research has been done into the epistemologies of students, the question of the epistemological beliefs developed by teachers and, in particular, business training personnel has so far been largely neglected. Consequently, there are no studies providing information on the type and number of trainers' beliefs about the nature and acquisition of knowledge. In other words, which epistemological beliefs trainers have and how they are shaped. It is also unclear whether and to what extent trainers' epistemologies change in the course of professional socialisation. However, there is definite consensus in the scientific community on the significance of these research questions (Boulton-Lewis, 1994; Bruce and Gerber, 1995; Buehl and Alexander, 2001; Köller, Baumert and Neubrand, 2000).

This study deals with the following questions:

1. What beliefs do business trainers have about knowledge and the acquisition of knowledge?
2. Do trainers' beliefs about knowledge and the acquisition of knowledge differ depending on their personal data?
3. How do trainers' epistemologies change in the course of professional socialisation?

By means of an explorative pilot study on the epistemological beliefs of business training personnel, the following text should provide some initial answers to the questions raised above.

## **Methodical approach**

### *Sample*

52 business trainers from firms in the Weser-Ems region took part in this pilot study. Here 'trainers' means all people directly involved in business training. They included 29 men (56.9 %) and 22 women (43.1 %). One person did not indicate their sex. The age of the trainers ranged from 20 to 59. On average, they were around 40 years of age ( $M = 39.5$ ;  $SD = 10.47$ ). With regard to school-leaving qualifications, the picture was as follows: 29 trainers (56.9 %) had a secondary school certificate and 22 had an advanced technical certificate or advanced level certificates (43.1 %). Of the 48 trainers who gave details of their vocational training, only five (10.4 %) did not complete any vocational training. It is notable that, with only two exceptions, all trainers surveyed are working in their trained occupations.

### *Survey tool*

The questionnaire by Schraw, Bendixen and Dunkle (2002) was used to record the trainers' general, i.e. domain-general, epistemological beliefs. This EBI (Epistemic Belief Inventory) is based on a multi-dimensional structure of epistemological beliefs. The questionnaire should be used to illustrate the five adopted dimensions: control of learning processes, speed of knowledge acquisition, structure of knowledge, certainty of knowledge, source of knowledge. The EBI consists of 28 items presenting statements on knowledge and the acquisition of knowledge. The EBI was translated into German for the purposes of data collection with only minor changes to the wording, as the questionnaire was originally developed for students. For example, the term 'student' was replaced by 'trainee' and 'professor' by 'trainer'. The translation had to be revalidated by means of factor analysis. Like the original version, a 5-stage Likert scale was used whereby a cross was marked against a person's level of agreement with statements on knowledge and the acquisition of knowledge. 1 stands for 'strongly disagree' and 5 for 'strongly agree'.

### *Procedure*

Data was collected on site at the firms. The participating trainers received identical instructions; there was no time limit for the completion of the questionnaires. The completion of the questionnaire took about 15 minutes. The trainers voluntarily took part in the survey without any expense allowance. The rate of response was 100 %. The data was collected in June and July 2006.

### **Results and interpretation**

The translation of the questionnaire into German and the minor modifications to the wording of the items required revalidation by means of factor analysis. Based on the multidimensionality of epistemological beliefs, the factor analysis was performed with Varimax rotation (uncorrelated, independent factors). The screeplot produced initial indications of the existence of five factors. Like Schraw, Bendixen and Dunkle (2002), the absolute factor loadings should be over .30. Items without loadings and items with multiple loadings were gradually removed. 16 items were finally included in the factor solution. The solution with five factors was confirmed (intrinsic value > 1.3). They explain 62.72 % of the variance. As only four of the five recorded factors indicate satisfactory test values, the following statements only relate to these four factors. These fully reflect the five dimensions adopted by Schommer: 'speed of knowledge acquisition' ( $\alpha = .88$ ), 'control of learning processes' ( $\alpha = .74$ ), 'source of knowledge' ( $\alpha = .64$ ) and 'structure/certainty of knowledge' ( $\alpha = .61$ ). The dimensions, 'structure of knowledge' and 'certainty of knowledge', are shown in a joint factor in this study.

The high level of consistency between the structure of items obtained and the original literature is notable (see Schraw, Bendixen and Dunkle, 2002) and this has also been replicated in other empirical studies with this German translation of the EBI (e.g. see Pfenich, 2007).

Table 1 below shows the four factors, factor loadings of the items, intrinsic values and Cronbach's alpha.

Table 1. **EBI Factor structure**

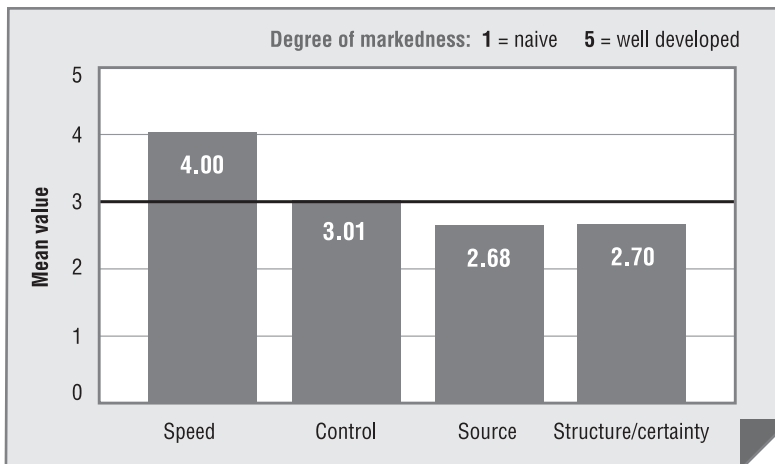
Factor 1.	<b>Speed of knowledge acquisition (intrinsic value = 5.12; <math>\alpha</math> = .88)</b>
	<ul style="list-style-type: none"> <li>• It is a waste of time working on problems you cannot solve quickly. (.83)</li> <li>• If you do not understand a subject when you first work through it, there is not much point in working through it again. (.75)</li> <li>• If you do not understand a subject immediately, you will probably never understand it. (.70)</li> </ul>
Factor 2.	<b>Control of learning processes (intrinsic value = 2.74; <math>\alpha</math> = .74)</b>
	<ul style="list-style-type: none"> <li>• Intelligent people are born that way. (.75)</li> <li>• Too many theories only complicate things. (.73)</li> <li>• If you spend too much time on a problem you will very probably end up confused. (.71)</li> <li>• The truth is a matter of opinion. (.64)</li> </ul>
Factor 3.	<b>Source of knowledge (intrinsic value = 2.21; <math>\alpha</math> = .64)</b>
	<ul style="list-style-type: none"> <li>• Students should always question the knowledge imparted to them by teachers. (.74)</li> <li>• If a lecturer presents a subject, I rely on the presentation being correct. (.69)</li> <li>• Trainees should always follow the trainers' technical instructions. (.66)</li> <li>• Students do not need to question knowledge which appears in text-books. (.59)</li> </ul>
Factor 4.	<b>Structure/certainty of knowledge (intrinsic value = 1.78; <math>\alpha</math> = .61)</b>
	<ul style="list-style-type: none"> <li>• Most things worth knowing are easy to understand. (.78)</li> <li>• The best ideas are usually the simplest. (.68)</li> <li>• Theories valid today will continue to be valid in the future. (.62)</li> </ul>

It is notable that two of the adopted dimensions come together in one factor of epistemological beliefs. Schommer declared that structure and certainty were separate factors. In this pilot study, however, structure and certainty of knowledge form one joint factor. This clustering was also confirmed in other empirical studies (Hofer, 2000; Qian and Alvermann, 1995). These results imply a possible close relationship between these two dimensions.

These results can be used to provide initial answers to the first research question about which beliefs business trainers have about knowledge and the acquisition of knowledge. Four dimensions of epistemological beliefs could be identified: speed of knowledge acquisition, control of learning processes, source of knowledge and

structure/certainty of knowledge. Using the empirical data, it is also possible to establish how developed the trainers' beliefs are. In other words: do they tend towards a naive position or are their beliefs about knowledge and the acquisition of knowledge highly developed, i.e. sophisticated? The items were recoded to make them easier to read so that a high level of agreement reflects a highly developed belief. Figure 1 below shows the trainers' mean values in the four established dimensions.

Figure 1. **Mean values for the four dimensions of epistemological beliefs**



It is clear that the beliefs of the trainers surveyed about knowledge and the acquisition of knowledge are in the mean area. Particularly in the speed dimension, they tend towards a well-developed position ( $M = 4.0$ ;  $SD = 0.95$ ), i.e. the trainers mostly tend towards the opinion that learning is a gradual process. Only a few of the trainers surveyed were of the opinion that learning is a quick process which either succeeds immediately or not at all. Therefore, 21.2 % of the trainers can be allocated to the most sophisticated position ( $M = 5$ ) and only about 8 % ( $M = 1.67$ ) tend towards a more naive position.

With regard to the dimension, control of learning processes, the trainers achieved a mean value of 3.01 ( $SD = 0.81$ ). Their belief is in the mean area. It can, therefore, be assumed that they are of the opinion that certain abilities and talents are fixed at birth, but that each individual has the chance to play an active role in the structuring of learning processes. 51.9 % of the trainers achieved a below-average value (up to and including 3) and 48.1 % are above average.

The dimensions, source and structure/certainty of knowledge, are equally developed. The trainers achieved an average value of 2.68 (SD = 0.63) or 2.70 (SD = 0.65). The beliefs lie in the lower to mid development area, i.e. with regard to source of knowledge, the trainers are mostly of the opinion that there are authorities on knowledge. The statement that knowledge can also be acquired through subjective and objective experiences (well-developed belief) consequently only meets with a limited amount of agreement. Furthermore, with regard to structure/certainty of knowledge, they are of the belief that knowledge partly consists of facts and is partly interrelated, that it is partly certain and is also subject to a process of development.

With regard to the second research question, the trainers' beliefs about knowledge and the acquisition of knowledge were examined to see if a distinction could be made between them in relation to their personal data. To do this, the mean values of the dimensions were examined for significant differences using the Kruskal-Wallis test.

A significant mean value difference in the dimension, source of knowledge, could only be determined in the four age groups (20-30 years old; 31-40 years old; 41-50 years old; 51-60 years old) ( $\chi^2 = 10.72$ ;  $df = 3$ ;  $p < .05$ ). To pinpoint which of the age groups differ in particular, the U test according to Mann and Whitney was performed in pairs. This produced the result that Age Group 2 (31-40 years old) differs significantly from Age Group 3 (41-50 years old) ( $p < .01$ ) and Age Group 4 (51-60 years old) ( $p < .05$ ). Figure 2 below shows the mean values of the four age groups in the dimension, source of knowledge. It can be seen that, with increasing age, the trainers have more naive beliefs about the dimension, source of knowledge. They tend to believe more in authorities on knowledge and are less of the opinion that knowledge is acquired through experience. It is also astonishing that the highest mean value, from the 31-40 year old age group, at 3.10 is just about average. Overall, it can, therefore, be said that the beliefs of the surveyed trainers with regard to the dimension, source of knowledge, tend towards a more naive level of development.

The third research question was concerned with a possible change in trainers' epistemological beliefs with increasing professional socialisation. Figure 3 shows the degree of development in epistemological beliefs for different numbers of years of professional experience.

Figure 2. Mean values for the age groups for the source dimension

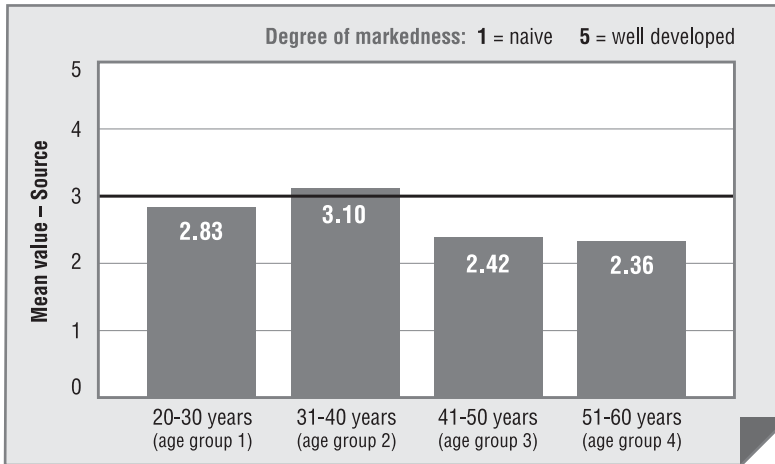


Figure 3. Development of the dimensions of epistemological beliefs with increasing professional socialisation

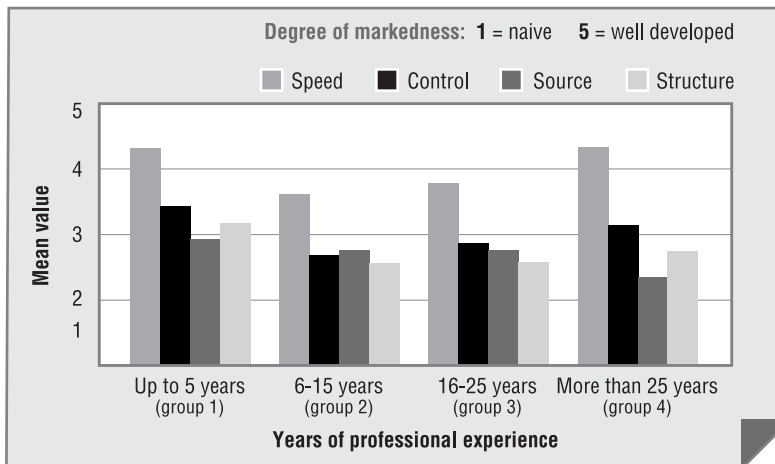


Figure 3 clearly shows a development in epistemological beliefs. The assumption that epistemological beliefs are subject to a process of development, i.e. they change with increasing professional socialisation, could be confirmed using empirical data. All four dimensions initially regress: in the transition from the first group (up to 5 years of professional experience) to the next (6-15 years of professional experience), the degree of markedness declines in all four dimensions of epistemological beliefs towards a more naive position.

Then, with increasing professional socialisation, an upward trend can be seen: the beliefs continue to develop, they become more sophisticated. Only the dimension, source of knowledge, behaves inversely. In this case, with increasing professional socialisation, there is a regression towards more naive beliefs.

The result for the dimension, speed of knowledge acquisition, is notable. In each phase of professional socialisation, the mean value is at a well-developed level. Consequently, the trainers surveyed all believe that learning is a gradual process which does not happen in an ad hoc way. If you consider their role as trainers in this respect, this belief can only be welcomed. It can be assumed that the trainers give their trainees time to grasp things and do not expect them to learn quickly. However, it has to be clarified whether this belief has become established in their roles as trainers based on their experience with trainees or whether other factors have had an influence.

Then, with the help of the U test according to Mann and Whitney, comparisons were made in pairs to check whether the mean values of the four groups differed significantly in the dimensions. It can be established that there are only significant differences between the four groups for different years of professional experience with regard to the dimensions, source and structure/certainty of knowledge. In this respect, Group 1 containing the people at the start of their careers (up to 5 years of professional experience) is in stark contrast, with regard to the dimension structure/certainty, to Group 2 (6-15 years of professional experience) and Group 3 (16-25 years of professional experience). Consequently, it can be assumed that the belief that knowledge tends to be complex, relative and interrelated (sophisticated belief), lessens with increasing professional experience, knowledge is simply structured and certain (more naive conviction).

With regard to the dimension source of knowledge, Group 4, in particular, (more than 25 years of professional experience) stands out: it differs significantly from Group 1 (up to 5 years of professional experience) and Group 2 (6-15 years of professional experience). Whilst the trainers with more than 25 years of professional experience believe in authorities on knowledge (more naive belief), the younger trainers tend more towards the opinion that there are authorities on knowledge but that knowledge can also be acquired through experience (more sophisticated belief).

Overall, it can be said that the people at the start of their careers tend towards optimistic, more sophisticated epistemological beliefs than trainers with many years of professional experience. As no longitudinal data was collected in this pilot study, future studies should



examine whether this development confirms the hypothesis of a possible recursivity of epistemological beliefs or whether it is possible that the degree of markedness in beliefs of the older generation of trainers has not changed over the course of their professional socialisation.

## Summary and outlook

The significance of epistemological beliefs in teaching and learning processes has been confirmed in numerous empirical studies. However, studies to date have mainly focused on pupils and students and thus on the role of epistemological beliefs in learning processes. Teachers, and therefore especially business training personnel, have so far tended to be neglected. There are no studies providing information on the type and number of trainers' beliefs about knowledge and the acquisition of knowledge. It has so far been unclear which epistemological beliefs trainers even have and how they are shaped.

This pilot study used a questionnaire to collect business trainers' beliefs about knowledge and the acquisition of knowledge. With regard to the research questions formulated at the start, the following results can be recorded:

1. What beliefs do business trainers have about knowledge and the acquisition of knowledge?
  - Using a factor analysis, four dimensions of epistemological beliefs could be identified: speed of knowledge acquisition, control of learning processes, source of knowledge and structure/certainty of knowledge. This result confirms previous studies based on a multidimensionality of these personal beliefs.
  - Furthermore, it can be recorded that the epistemological beliefs of the trainers surveyed are in the mean area of development. Only the speed dimension is more marked, i.e. the trainers are of the sophisticated belief that learning is a gradual process.
2. Do the trainers differ in their beliefs about knowledge and the acquisition of knowledge?
  - The trainers' epistemological beliefs can be classed as homogeneous. There are only significant differences between the age groups with regard to the dimension, source of knowledge. For all other personal data collected, no significant differences could be established in the dimensions of epistemological beliefs.

### 3. How do trainers' epistemologies change during the course of professional socialisation?

- The empirical data indicates a process of development of epistemological beliefs. Therefore, people at the start of their careers tend to have optimistic, more sophisticated beliefs and, with increasing professional experience, the trainers' beliefs become more pessimistic and more naive. The difference in the degree of markedness of the dimensions confirms the hypothesis that they are independent of each other, i.e. they do not have to develop synchronously and even recursive developments are possible.

With regard to the theoretical concept of epistemological beliefs, the results of this pilot study allow the following aspects to be summarised: firstly, the multidimensionality assumed in current studies could also be confirmed in this empirical study. Consequently, independent dimensions of epistemological beliefs can be demonstrated which have developed to a varying degree. Furthermore, however, the five dimensions claimed by Schommer to be independent facets of personal beliefs about knowledge and the acquisition of knowledge could not be replicated. Rather, a clustering of the dimensions, structure of knowledge and certainty of knowledge, could be demonstrated, which indicates a possible close connection between them for the sample of trainers. Further studies must examine whether this clustering is stable for other samples. The hypothesis that epistemological beliefs are subject to a process of development could also be proven with the empirical data.

In addition to aspects of conceptual clarification of the construct of epistemological beliefs, important implications for the education of trainers can be drawn from this study. As was already clear at the start, epistemological beliefs are particularly relevant to research into teaching and learning, they have a direct function in directing and controlling actions. In particular, trainers' beliefs are of great interest, as initial empirical studies have been able to demonstrate that students' beliefs about knowledge and learning are strongly influenced by the teaching styles and beliefs of teachers (e.g. see Buelens, Clement and Clarebout, 2002; Hofer, 2004). An objective for the professionalisation of training practice must, therefore, be to encourage the trainers' beliefs about knowledge and the acquisition of knowledge. For example, using the results of the study, training modules can be developed and provided, which thematise the significance of and findings about epistemological beliefs in order to structure business teaching and learning processes. Furthermore, on the basis of the results, handouts can be developed for

trainers which, taking epistemological beliefs into account, support the structure of business teaching and learning processes. Recommendations can also be submitted to the chambers showing how the results can be included in the preparatory seminars for trainer aptitude tests.

Finally, it has to be said that there is a need for much more research into the epistemological beliefs of business trainers. The results obtained in this pilot study are to be examined in later studies. Another challenge for empirical research is to examine the effects of epistemological beliefs on trainers' behaviour in teaching situations. In addition, further research can be done on how the domain-specific epistemological beliefs of trainers are shaped and their relationship with broad, domain-general beliefs about knowledge and knowledge acquisition.

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# Exceptionally gifted women in vocational training

## Margrit Stamm

Full professor of educational science, focusing on socialisation and human development, at the University of Fribourg, Switzerland

## Michael Niederhauser, lic. rer. soc.

Research assistant on the project entitled 'Giftedness and performance excellence in vocational training' at the Department of Educational Sciences, University of Fribourg, Switzerland

### SUMMARY

**This article investigates the extent to which exceptionally gifted women in vocational training differ from their exceptionally gifted male colleagues. On the basis of a Swiss follow-up study of the development of performance excellence of particularly gifted apprentices, three areas were investigated in more detail: choice of occupation, stress behaviour and performance development. Gender-specific differences are observed in all three areas. It is particularly noticeable that female apprentices, although significantly less resistant to stress, perform more successfully in individual fields of competence than gifted male apprentices. The further course of these women's vocational training is therefore of great interest.**

### Keywords

Giftedness, gender, vocational training, apprentices, performance excellence, overcoming stress

## Giftedness and gender in vocational training

Findings on gender differences are legion in educational/psychological research, and there have also been some contributions from the field of giftedness research (Beermann et al., 1992; Wagner, 2002). They relate primarily to two tendencies: First, women are under-represented in technical/mathematical/scientific training fields. Secondly, they seem less single-minded in their training ambitions than men, and also less sure of success than men. Recently, the situation appears somewhat different: in many Western and Eastern countries, girls have caught up with boys, and so on several occasions it has been reported that the gender gap has been eliminated (Hyde, 2005). In German-speaking Europe, this applies both with respect to the *Abitur* [university entry examination] figures and to completion of degrees in medicine and law, and to the significantly increased participation of girls in gifted student support programmes (Kerr, 1997; Wagner, 2002). The same applies to vocational training (Bundesministerium für Bildung und Forschung, 2004 Bundesamt für Berufsbildung und Technologie, 2006).

However, a more subtly differentiated look at training statistics that includes career patterns shows that there continue to be gender-specific and social hierarchies which are reflected in poorer career opportunities for women. For example, women occupy only a very limited number of top positions in industry and politics (Cornelißen, 2004). Women's and men's salaries also continue to differ significantly in German-speaking Europe. In 2003, women in Switzerland earned around 80 % of the annual income of a man; in Germany the figure was 75 %. However, these income disadvantages are to a large extent the result of career breaks. Young women are also affected by youth unemployment to a greater extent. Of those aged 15 to 24, in Germany an average of 15 % are unemployed, in Switzerland 4.6 % and in Austria 9.8 %. In all three countries, the unemployment figures are higher by over one third for women (Bundesinstitut für Berufsbildung, 2006).

What is the position in vocational training with regard to exceptionally gifted apprentices? What profiles do particularly gifted women display with respect to their male colleagues? A Swiss follow-up study on the development of talented apprentices in vocational training pursues such questions. Against the background of the current discussion of excellence in vocational training, they are of particular interest for two reasons: firstly because vocational research into giftedness, generally and with a specific focus on gender themes, is still in its infancy; secondly, because it must be



a significant objective of vocational training to foster performance excellence in both genders in accordance with their performance potential and not in accordance with old-fashioned patterns of attribution.

## Objective of the study and sample

The Swiss follow-up study, entitled *Hoch begabt und „nur“ Lehrling?* [‘Exceptionally gifted and “only” an apprentice?'], runs from 2004 to 2008. It seeks to investigate the performance of particularly gifted apprentices in vocational training and to ask to what extent they are able to implement their potential in performance excellence and what supportive measures firms providing training and vocational colleges supply in reaction to this. The subjects investigated are (a) giftedness profiles, personality traits and environmental features, (b) performance development from completion of compulsory schooling until the end of vocational training, and (c) support and assistance supplied by firms providing training and vocational colleges (Stamm, 2007a).

In autumn 2004, by means of a three-stage selection procedure, 2 706 apprentices at a total of 21 randomly selected Swiss vocational colleges were analysed using the performance examination system (L-P-S) of Horn (1983). It covers practical/technical intelligence, dexterity and spatial sense. Additionally, other criteria deemed relevant to giftedness on the basis of the research, such as prior knowledge, school grades and motor and manual capabilities, were recorded. This made it possible to include 191 people (7.6 %) in the talent pool. They had above-average L-P-S scores corresponding to an intelligence quotient of  $\geq 120$ . This group was contrasted with a group, also selected randomly and parallelised in terms of gender, of merely averagely gifted apprentices (control group,  $N=146$ ). In contrast to the control group, in which the ratio of men to women is 60 : 40 %, the talent pool consists of 49 % ( $N=93$ ) female and 51 % ( $N=98$ ) male apprentices. This means the proportion of women is significantly higher. While there are no significant differences between the genders in the intelligence areas recorded, overall the women achieved slightly better scores than the men.

The key qualifications were recorded as criteria for performance excellence. These qualifications are interdisciplinary, content-neutral but practically relevant requirements on the part of an enterprise which are necessary for filling a post. We have geared our study towards Schelten (2002) and Ripper and Weisschuh (1999). Schelten distin-

guishes four forms of key qualifications: substantive knowledge and skills (practical knowledge and skills as well as general knowledge); formal capabilities (independent thinking and learning, powers of coordination and concentration); personal capabilities (an employee's virtues such as conscientiousness, sense of responsibility, critical faculties); social capabilities (group-oriented behaviour).

To date, the apprentices have been questioned in two waves of surveys (in spring 2005 and 2006) about their character, their family and company/educational context, and their key qualifications. At the same time, the trainers were also asked to evaluate the performance potential of their apprentices. Further interviews will take place in summer 2007 and 2008.

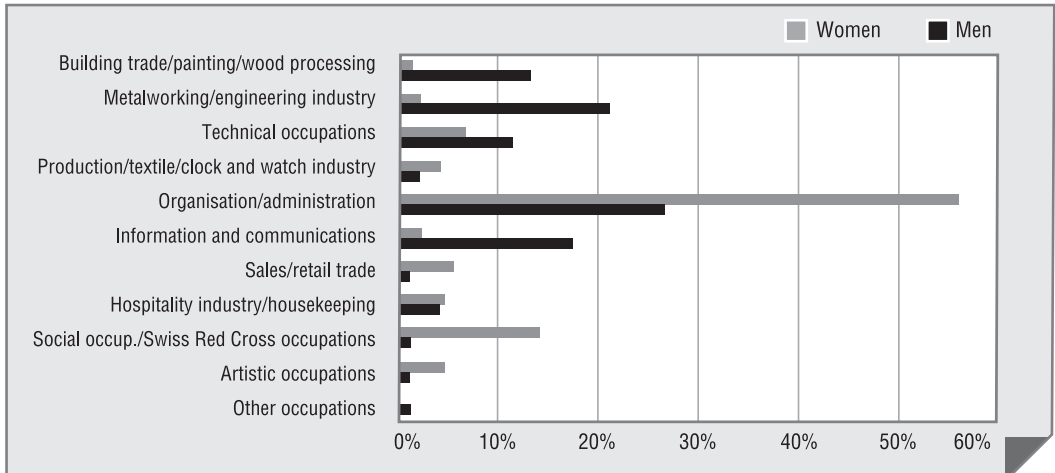
This article investigates three selected aspects of relevance to the development of performance excellence: choice of occupation, stress behaviour and performance assessment by the trainers. It asks what distinguishes exceptionally gifted female apprentices from exceptionally gifted male apprentices and where their common ground lies.

## Occupational areas and gender

The choice of a specific occupational area is a complex and fairly long-term process characterised by certain prestructured features before the actual deliberate choice is made (Wieczerkowski, 2002). We know from giftedness research that gifted young women and men already differ in their choice of optional subjects in school and later in their choice of occupation and study. According to Fauser and Schreiber (1996) and Fauser and Egger (2005), in the scholarship programme for gifted vocational apprentices, the rate of representation of women, at 50 %, is disproportionately high compared with the proportions in vocational education, although these women come almost exclusively from service occupations, while men are predominantly employed in skilled occupations.

Which occupational areas did our gifted female and male apprentices choose? It can be seen from Figure 1 that our study also demonstrates a typically gender-specific distribution across the various occupational areas. At a figure of 56 % of talented female apprentices, in percentage terms just over twice as many female as male apprentices are training for an occupation in the field of organisation and administration. Furthermore, female trainees are more strongly represented in social and artistic occupations than male apprentices. However, the latter are dominant in the fields of the building trade,

Figure 1. Occupations of talented apprentices according to gender



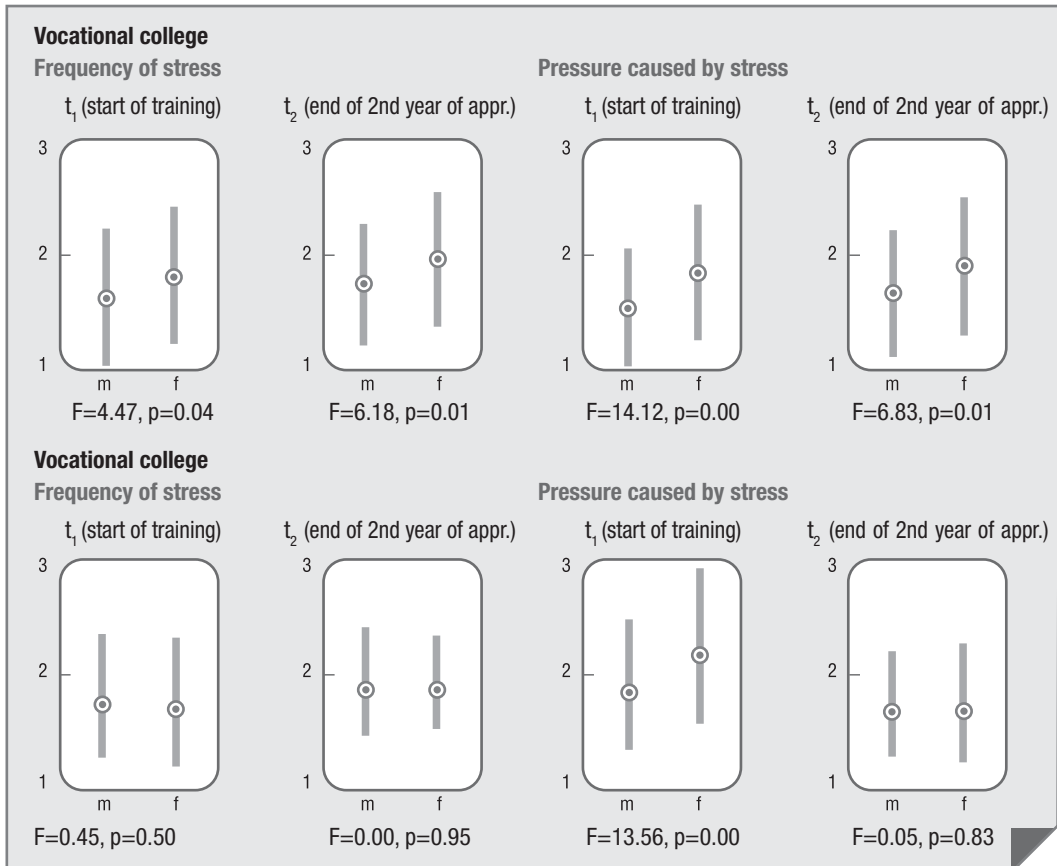
production and industry, information and communications and in the category of other technical occupations. In contrast, among talented women these occupational areas have only marginal representation of around 2 % to 6 %.

The gender-specific distribution of talented apprentices across the various occupational areas in our study approximately reflects the countrywide gender ratio among all occupational trainees in Switzerland. For example, in 2006 around 50 % of all new female trainees were training in an occupation in the field of administration and business, whereas this field only accounts for slightly more than a quarter (27 %) of male apprentices (Bundesamt für Statistik, 2005).

### Stress behaviour and gender

Stress is a state of imbalance between the requirements of the environment and personal performance assumptions. This state of imbalance is of personal significance and is experienced as unpleasant by the person involved. The most recent research works are American research works which investigate stress symptoms in connection with giftedness (Mallinckrodt & Leong, 1992). They prove that factors which in gifted people may lead to stress symptoms relate to being underchallenged, feelings that certain aspects of work are pointless, critical feedback which is (mis)interpreted by persons in authority as a challenge, fruitless attempts to adjust, and

Figure 2. Frequency of stress and pressure caused by stress



Notes: Mean value +/-1s; m=male, f=female; survey times (t<sub>1</sub>/t<sub>2</sub>);  
N<sub>m</sub>=98, N<sub>f</sub>=93 (N can vary as a result of missing values).

so on. Powerful striving towards perfectionism, aimed at avoiding errors, can also trigger symptoms of stress (Stamm, 2007b). As a result, therefore, the desire to make everything perfect, coupled with fear of not being able to fulfil the high demands made by third parties and of failing, thus seems to cause stress among gifted young people (Misra et al., 2000). In our study, we investigated such questions by asking the apprentices, on the basis of the survey tool of Seiffge-Krenke (1989), (a) about the frequency of stress and (b) about the pressure caused by stress.

Figure 2 shows the results. It illustrates the mean values and standard deviations (mean value +/- 1 standard deviation) of the frequency perceived and the personal pressure experienced by the male and

female apprentices as a result of stress at vocational college and in the firm providing training. It can be seen from the graphics that the gifted female apprentices are less resistant to stress. They discern stressful situations more frequently and also experience greater pressure as a result of stress than the male trainees.

At the time of the first survey at the beginning of the apprenticeship, the particularly gifted women at vocational college noticed stress situations significantly more frequently than their equally gifted male colleagues ( $M_{\text{women}}=1.82$ ,  $M_{\text{men}}=1.63$ ). The difference between the genders is even more pronounced with respect to the personal pressure caused by stress. The female apprentices perceived themselves to be under considerably more pressure as a result of vocational college stress than the male apprentices. The difference is highly significant ( $M_{\text{women}}=1.82$ ,  $M_{\text{men}}=1.51$ ). In firms providing training, while at the beginning of their apprenticeships women and men perceived stressful situations to be approximately equally frequent, ( $M_{\text{women}}=1.70$ ,  $M_{\text{men}}=1.75$ ), the women felt themselves to be under considerably more pressure as a result of stress than their male colleagues ( $M_{\text{women}}=2.17$ ,  $M_{\text{men}}=1.82$ ). Overall, therefore, the gifted female apprentices demonstrated considerably more disadvantageous pressure caused by stress at the start of their apprenticeship both at vocational college and in the firm providing training.

This situation had changed by the end of the second year of the apprenticeship: at vocational college, both the frequency and the pressure caused by experiencing stress had risen slightly among both genders, and significant differences were still to be found. In firms providing training, on the other hand, while the frequency of stressful situations had increased, the level of pressure experienced had decreased. This applied to both genders, but was somewhat more pronounced among the women than the men. Therefore, the differences are only a matter of chance.

In contrast to the particularly gifted women, the gifted men experienced clear and significant negative correlations between stress perception and performance at the firm. The more distinctly gifted men perceived stressful situations in the firm providing training, the lower their performances overall ( $r_{11}=-0.61$ ,  $p<0.01$ ;  $r_{12}=-0.45$ ,  $p<0.01$ ). There is also a tendency towards these negative correlations among the gifted women, but to a significantly smaller extent. With regard to the correlation between stress at vocational college and performance at college, it can be established for both genders that the perceived stress at vocational college correlated significantly negatively with performance in mathematics, but not with performance in German as a subject. The more frequently pressurised stressful

situations were perceived, the worse the apprentice's performance in mathematics. Among the gifted men, the perceived frequency of stressful situations correlates more strongly with the mathematics grade than pressure caused by such stress ( $r_{\text{frequency t2}} = -0.44$ ,  $p < 0.05$ ;  $r_{\text{pressure t2}} = -0.29$ ,  $p > 0.05$ ); among the particularly gifted women matters are exactly the opposite ( $r_{\text{frequency t2}} = -0.29$ ,  $p < 0.05$ ;  $r_{\text{pressure t2}} = -0.52$ ,  $p < 0.01$ ). Since the vocational college grades in mathematics and German were only surveyed for trainees sitting the vocational *Abitur* ( $N=58$ ), these findings should be interpreted with caution.

If the stress perception of particularly gifted women is compared with that of averagely gifted women, a significant difference can only be determined for the perceived frequency of stressful situations in the firm providing training at the time of the first survey. At the beginning of the apprenticeship, averagely gifted women perceived fewer stressful situations at the training firm than gifted women ( $M_{\text{exceptionally gifted}} = 1.70$ ,  $M_{\text{averagely gifted}} = 1.93$ ,  $F = 5.33$ ,  $p < 0.05$ ). Otherwise, the differences between particularly gifted women and averagely gifted women are rather small and not all significant. There was an overall tendency for particularly gifted women to feel under more pressure, both as a result of stress at vocational college and in the firm providing training, than normally gifted women. After one year of the apprenticeship, at the time of the second survey, this tendency had been exactly inverted.

## Performance evaluation by trainers

Table 1 provides findings regarding the evaluations of key qualifications as features of performance excellence by the trainers at the beginning of training and at the end of the second year of the apprenticeship.

First of all, it can be seen that at the start of the apprenticeship the gifted women were evaluated as being better overall in terms of key qualifications than the male apprentices. The differences are clearest in the area of routine actions ( $M_{\text{women}} = 3.71$ ,  $M_{\text{men}} = 3.50$ ) and with respect to compliance with requirements ( $M_{\text{women}} = 3.87$ ,  $M_{\text{men}} = 3.65$ ). At the end of the second year of the apprenticeship, however, the situation is different: the male apprentices have caught up with the women in routine actions ( $M_{\text{women}} = 3.62$ ,  $M_{\text{men}} = 3.63$ ), although the increase in performance by the gifted men is not significant ( $T = 1.63$ ,  $p > 0.05$ ). It is only in the field of compliance with requirements that women are still assessed to be better ( $M_{\text{women}} = 3.82$ ,  $M_{\text{men}} = 3.66$ ), but the difference has also decreased here.

Table 1. Performance evaluation by trainers, broken down by gender

Performance excellence (key qualifications)		t1 (start of training)		t2 (end 2nd year of apprenticeship)		T	Sig.
		M	s	M	s		
Routine/effective actions	Female	3.71	0.69	3.62	0.70	-0.93	0.36
	Male	3.50	0.70	3.63	0.71	1.63	0.11
Problem-solving	Female	3.32	0.92	3.34	0.90	0.13	0.90
	Male	3.39	0.92	3.49	0.96	0.88	0.38
Ability to communicate	Female	3.55	0.83	3.51	0.87	-0.33	0.74
	Male	3.57	0.74	3.51	0.81	-0.56	0.58
Innovative ability	Female	3.25	0.93	3.28	0.85	0.22	0.83
	Male	3.45	0.78	3.48	0.88	0.25	0.80
Social competence	Female	3.74	1.04	3.74	1.04	0.00	1.00
	Male	3.79	0.97	3.84	0.82	0.35	0.73
Compliance with requirements	Female	3.87	0.75	3.82	0.76	-0.58	0.56
	Male	3.65	0.77	3.66	0.69	0.11	0.91

All scales range of values 1-5; M=Mean values, s=standard deviations, T-Test for related samples, Sig. = Significance.

## Conclusion

The findings on the gender-related development of performance excellence in vocational education described in this article prove that exceptionally gifted women constitute a special group. Why?

1. The proportion of women among exceptionally gifted apprentices in our study is significantly higher, at 49 %, than the proportion of women among averagely gifted apprentices. Since our talented young women also have slightly higher intelligence quotients than their equally talented male colleagues, it is legitimate to state that this group has a specific profile.
2. However, the specific features of this profile are not constant. The choice of training occupations, for example, is just as gender specific as is the case for averagely gifted women. This means that, even if they have identical, above-average capabilities in areas such as practical, technical/theoretical and analytical/synthetic intelligence, the genders differ considerably in their choice of occupation. The choice of occupation is also gender specific in the case of exceptionally gifted apprentices. Thus, a preference for an area of interest might not be merely a question of an individual's own capabilities, but also of the role expectations at

school and within the family, cultural integration, peer relationships, and so on.

3. Specific features are also apparent with respect to the experience of stress. It is considerably more pronounced among exceptionally gifted female apprentices than among their equally gifted male colleagues. The women experience more stress and also feel less resilient than men; this results in pressure as a result of stress, which is disadvantageous overall. For both sexes, this pressure increases during the course of training at the vocational college, while it decreases slightly at the firm providing training. However, this applies to the women to a greater extent: overall, they seem to have become more resistant to stress at the end of the second year of the apprenticeship.
4. In comparison with their male colleagues, the exceptionally gifted women are judged in a more positive manner overall by the trainers with respect to performance development. However, a slight drop in performance excellence can be detected in the first two years of the apprenticeship. There is no simple interpretation of this fact. It is conceivable, for example, that the female apprentices were the subject of a certain amount of sympathy at the beginning of the apprenticeship, which made it more difficult to obtain a realistic judgement. Consequently, the assessment by the apprentices' trainers when they began their apprenticeships would have been too stringent for the exceptionally gifted male apprentices and too positive for the gifted female apprentices.
5. The question of why talented women demonstrate such high levels of pressure as a result of stress even though they have been judged so well by their trainers must remain unexplained for the time being. Does experiencing stress result in high levels of performance? Or do attitudes of high expectations on the part of trainers lead to stress reactions? Finally, could other factors – such as the climate within the firms, structures of relationships with other apprentices, examination pressure, etc. – not also be responsible for this? What role do perfectionism, being underchallenged or critical feedback play?

It is not currently possible to answer such questions using the set of data which is available. However, the question of stress resistance and the role played by the training firm and vocational college will be raised particularly carefully in the next surveys. We therefore hope to be able to use the data determined to clarify the mutual correlations between stress resistance and performance excellence as the expression of particular vocational giftedness by means of appropriate structural equation models.



Precisely these gender-specific results are of great interest for the future development of performance excellence: what personal characteristics and/or personal qualifications will do most to foster success in training? A high self-image (which would speak in favour of the male trainees) or committed and goal-oriented persistence (which would speak more in favour of the women)? It will not become apparent which apprentices will actually be particularly successful and which will not until the project ends in 2007. *The fact* that the particularly gifted women in our study have extraordinary potential is not in doubt. However, *how* and in *what ways* they will be able to put it into practice must for the time being remain the great unanswered question.

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# Level III apprenticeship in Portugal – notes on a case study <sup>(1)</sup>

**Ana Rute Saboga**

History Teacher, basic and secondary education

## SUMMARY

**This article presents the results of research into how young trainees in the level III apprenticeship system formulate their educational and professional plans, what expectations they have of obtaining socially and professionally recognised qualifications, and in what way enterprises see such training as a strategy for providing human resources with qualifications.**

**The empirical research was carried out in two contexts (vocational training centre and enterprises) by means of two questionnaires, one addressed to the trainees involved and the other to the persons responsible for enterprises hosting on-the-job training.**

**The results obtained show that this type of training represents an opportunity for the Portuguese education system, which faces high levels of failure and persistently high numbers of premature school leavers. The pedagogical value of on-the-job training is underexploited, however, pointing towards a combination of employment and education and towards the promotion of activities more characteristic of Taylorism.**

## Keywords

Portugal, equal opportunities, vocational education, dual system, motivation, human resources

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<sup>(1)</sup> This article is based on a Masters dissertation in *Educação e Sociedade* presented at the *Instituto Superior das Ciências do Trabalho e da Empresa* (Lisbon).

## Introduction

Since coordination between the education and training systems and the economic structure in Portugal is particularly important because it is an area in which there is a great deal of lost ground to be made up (low educational level of a large part of the adult working population and low secondary education enrolment and success), it has become necessary to consider ‘the stepping up of work-linked training strategies, combining school-based instruction with on-the-job training’ (Carneiro, 2000: 96). This idea was explicitly endorsed in the Report from the Commission to the European Parliament and the Council <sup>(2)</sup> on the promotion of European pathways in work-linked training.

In Portugal the various secondary education courses <sup>(3)</sup> fall into the following areas: i) science and humanities – organised and designed for the pursuit of higher education studies; ii) technology – organised from a dual perspective, the pursuit of higher education studies and post-secondary technological specialisation courses, and inclusion in the labour market, with emphasis on the new technologies; iii) specialised art education – designed to promote the development of the different forms of artistic expression in specially designed and equipped schools; iv) vocational education – focusing on skills development to ensure appropriate inclusion in the labour market; v) vocational training – giving concrete expression to the principle of a combination of employment and education and building a personal pathway, currently identified as ‘apprenticeship’.

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<sup>(2)</sup> 21 December 1998, on the promotion of European pathways in work-linked training.

<sup>(3)</sup> For an overview of vocational education and training systems in Portugal, see: [http://portal.iefp.pt/portal/page?\\_pageid=177,160114&\\_dad=gov\\_portal\\_iefp&\\_schema=GOV\\_PORTAL\\_IEFP&id=2](http://portal.iefp.pt/portal/page?_pageid=177,160114&_dad=gov_portal_iefp&_schema=GOV_PORTAL_IEFP&id=2)

## Level III apprenticeship in Portugal

In countries in which academic models prevail, as in Portugal, training schemes such as apprenticeship represent alternatives for people who leave the education system prematurely and who are potentially at risk of unemployment or exclusion (Azevedo, 2001a; Guerreiro and Abrantes, 2004). Vocational training provision can therefore lead to less recognised educational and vocational pathways, 'since the consolidation and sustained development of diversified, coordinated and high-quality secondary education and training capable of attracting a varied demand, without creating socially and educationally stigmatised pathways' (Azevedo, 2002: 48) has failed. In countries in which the dual system is well established, such as Germany, the social demand for this type of training is greater and more diversified (Heinz, 2000), and much less stigmatised.

In the second half of the 1990s, level III apprenticeship courses expanded very rapidly, rising from 7 028 trainees in 1994 to 17 534 in 2000. The range of reforms carried out <sup>(4)</sup> probably played a role in this, not only repositioning the scheme within the education/training system but also improving the quality of the training delivered, particularly its most characteristic dimension – on-the-job training. It also enjoyed favourable funding through Community Support Frameworks II and III, a strategic priority of which is human resources development and modernisation of production infrastructure. In this context the Employment, Training and Social Development operational programme states that the most significant obstacles facing young job seekers include lack of work experience and effective mechanisms to facilitate the transition from school to working life. According to the same programme, in order to bridge this gap, all training paths and the vocational training forming part of the education system and the labour market must be strengthened, focusing on work-linked training in particular.

The most recent statistics show that the population currently involved in this type of training covers approximately 6 % of secondary education pupils, as can be seen from Table 1.

Level III apprenticeship, currently the responsibility of the *Ministério do Trabalho e da Solidariedade Social* [Ministry of Labour and Social Solidarity], is an alternative type of secondary education training which is essentially geared towards giving young people experience of real work situations and local and sectoral production environments.

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<sup>(4)</sup> Decree Law 205/96 of 25 October.

**Table 1. Distribution of secondary education enrolments according to the different types**

	General/ scientific humanistic	Tecnological	Art	Vocational	Recurrent	Education/ training courses	Level III apprentice- ship *
2003/2004	199 880	50 837	1 566	31 346	75 489	–	18 737
2004/2005	189 567	55 337	2 317	33 131	64 842	520	20 811

Source: Preliminary data – Gabinete de Informação e Avaliação do Sistema Educativo.

\* These data relate to calendar years (2003 and 2004).

Source: *Sistema de Gestão da formação* – SGFOR via BO – Business Objects.

Taking the combining of employment and education as a training method, the main aim of apprenticeship is to combat failure and unemployment among young people while training skilled labour for the process of modernisation and innovation which the business community demands so much.

All apprenticeship courses <sup>(5)</sup> include three training components: socio-cultural, scientific-technological and practical. The first component involves areas seeking to provide transversal skills, both in terms of academic knowledge and in attitudes fostering personal and behavioural development, with a view to increasing employability and facilitating the ability to work and to perform different social roles in various contexts, particularly employment. The scientific-technological training component involves areas geared towards acquiring the knowledge necessary for specific techniques and information technologies, developing practical activities and providing experience in a training context, and resolving problems typical of the workplace. The practical training component, delivered in a work environment and overseen by a tutor, seeks to consolidate the skills and knowledge acquired in training <sup>(6)</sup> by performing typical workplace activities, and to facilitate young people's integration into the labour market. Practical training, however, must not exceed 50 % of total training time, and must include on-the-job training (30 %) and practical simulation (20 %).

<sup>(5)</sup> See in this respect: [http://portal.iefp.pt/portal/page?\\_pageid=117,104253&\\_dad=gov\\_portal\\_iefp&\\_schema=GOV\\_PORTAL\\_IEFP.\[26.4.2007\]](http://portal.iefp.pt/portal/page?_pageid=117,104253&_dad=gov_portal_iefp&_schema=GOV_PORTAL_IEFP.[26.4.2007])

<sup>(6)</sup> The aim is effective coordination of the training and work environments. Conditions must be created for developing the stakeholders involved, since certain reference points must be set out that relate to what should be learned in each training environment and to the coordination, over time and in training methods, between each component. It is more demanding in terms of the role of the enterprise, which will have to make itself aware of the coordination envisaged and foster situations that allow such training (Imaginário, 1999: 30; Pedroso, 1996: 272-273).

Both an educational equivalence qualification and a certificate of professional competence are awarded. Coordination within the general training system involves training provision that does not exclude involvement in future educational pathways, particularly admission to higher education. Conditions can accordingly be created that raise the value society attaches to vocational education for young people, thereby helping to produce the personnel with intermediate qualifications the country is in such need of (Azevedo, 2002). The various social stakeholders involved, however, will have to change their attitude if a view of education tending to confirm and consolidate inequalities between individuals and groups based on social representations of training courses and areas is to be superseded.

Natália Alves (1996) draws attention to the fact that although work-linked training is closely associated to the German dual system, rather than being an attribute of a single specific mechanism it is in fact transversal to various types of training. It is precisely this transversal nature that helps to ensure that work-linked training cannot be characterised either as a mechanism with its own identity or as a specific type of any education/training system. Its definitions <sup>(7)</sup> and teaching potential, however, mark out the field of reference in which it is situated.

The German dual system has various strong points, in particular as regards on-the-job training. While the training component functions in schools on a public basis, it functions in enterprises on a private basis and is heavily co-funded, leading enterprises to see it as investment-related. Neves (1993) highlights two strong points: i) by funding the training, enterprises tend to maximise returns by employing the young people they invest in; ii) by meeting the costs of training, enterprises necessarily consider themselves to be partners with an interest in its quality. The German dual system was therefore seen as a model to be emulated. Even though attempts were made to apply this reference point to other contexts, the German corporate investment conditions were difficult to obtain, which hindered the full reproduction of the model.

In the Portuguese case, despite the intentions set out in the *Lei da Aprendizagem* [Apprenticeship Act] <sup>(8)</sup>, which advocated strong

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<sup>(7)</sup> The combining of employment and education has been referred to as a key concept in the context of vocational education and training. However, it embodies a significant range of ambiguities and a certain conceptual inaccuracy, often designating different reference points (Pedroso, 1996).

<sup>(8)</sup> Decree-Law no 102/84 – creation of the apprenticeship system, seeking to launch a nationwide programme.

corporate involvement in this training programme, resistance and limitations arose in terms of investment that meant that the underlying philosophy had to be reversed to some extent: 'in Portugal, the feasibility of apprenticeship required (...) the public authorities to be very willing to promote the system, financially compensating enterprises for their costs (fall in productivity, materials used, working hours of monitors), the enterprises only contributing to the young people's training grant' (Neves, 1993: 55). In these circumstances the responsibility of the enterprises and their consequent involvement tended to decline, jeopardising the quality of the on-the-job training component. This means that training time in the enterprise is often pedagogically under-exploited, and that the degree of coordination between the two training reference points erodes. Pedroso (1996: 278) argues that the root of the problem lay in the type of relationship established between training context and work environment, the level of pedagogical consultation among training personnel, the combination of employment and education underlying the practice of the personnel involved, and the concrete experience of the trainees whose personal experience includes both dimensions. Acceptance of the low training potential of the work situation may correspond to undervaluing work-linked training and a relative lack of interest in it as a training scheme in Portugal (Neves e Pedroso, 1994: 33).

Recent statistics indicate that Portugal has a clear shortfall in intermediate and senior personnel compared to other European Union countries (Costa, 2000; Azevedo, 2002), and it is precisely in this context that the value of work-linked training is twofold: it helps to raise young people's qualifications and simultaneously develops skills and knowledge acquisition that promote the internalisation of a culture of participation and foster the freedom and development of trainees as individuals and citizens.

It is therefore important to find out how young trainees in the apprenticeship system (level III) map out their educational and vocational plans, what expectations they have of acquiring socially and vocationally recognised qualifications, and how enterprises consider such training as a human resources development strategy.

What is the social origin of these young people? What socio-educational resources do their parents have? What led them to opt for the apprenticeship system? What do they think of this type of training? What are their educational and vocational expectations? Do the skills that enterprises value coincide with the skills developed in the training programme? Does the social representation of this type of training have an influence on the way enterprises invest in and create



strategic links with it? These are some of the questions this study sought to address.

The research was carried out in a directly managed vocational training centre <sup>(9)</sup> that offered substantial training provision <sup>(10)</sup>, both quantitatively and in terms of the diversification of level III training areas, and in a range of enterprises hosting the on-the-job training. It then focused on 279 trainees, distributed among 21 1st, 2nd and 3rd year cohorts, and 56 enterprises that hosted the training in a real work environment. Given the variety of stakeholders involved, it was decided to use questionnaires, one addressed to the trainees <sup>(11)</sup> (social background, educational pathway, degree of satisfaction with the training course, expectations of upward social mobility) and the other to the persons responsible for the enterprises involved (size of enterprise, branch of activity, human resources, degree of satisfaction with the training courses, evaluation of the operation of the course, involvement in the training process and expectations of the trainees involved).

## Trainees' thinking and expectations

### Socio-demographic profiles

In Portugal, little research has been carried out on the young people who undergo this type of training. The need for greater awareness of the social basis of recruitment for this training provision meant that particular attention was paid to describing the socio-demographic profiles.

The young people involved are between 15 and 24 years of age, the majority being male (M= 68.8 %; F= 31.2 %). A significant discrepancy in the gender distribution on each course was also in evidence. As can be seen, the courses in which each gender has

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<sup>(9)</sup> Local executive bodies, coordinated by the regional delegations, with the social partners represented on the respective advisory boards. These vocational training centres are responsible for scheduling, preparing, implementing, supporting and evaluating initial or continuing vocational training initiatives and for ensuring that the vocational certification system functions at local level, thereby promoting human resources development and stimulating development in their regions.

<sup>(10)</sup> This vocational training centre, part of the Lisboa e Vale do Tejo regional delegation, was formed through the reorganisation/merger of two centres in the same region. It is located in an area with a large concentration of enterprises, allowing it to offer a wide range of vocational training courses. It mainly serves the districts of Amadora, Cascais, Oeiras and Sintra.

<sup>(11)</sup> The questionnaires were used with the 21 cohorts between 28 April and 7 June 2004.

a significant majority appear to correspond to a sexist division of labour, bearing witness to the traditional effects of occupational gender stereotyping on young people's choices. Boys therefore prefer more industry and technology-based courses, where contact with the work environment is more masculine, while girls gravitate more towards services-related courses.

**Table 2. Trainees according to gender and training course followed (%)**

	Gender	
	Male	Female
Computer technician	89.6	10.4
Typesetter	56.8	43.2
Off-set printer	85.7	14.3
Graphic designer	75.0	25.0
Managerial support staff	46.7	53.3
Hotel receptionist	38.5	61.5
Clerk	0.0	100.0
Accountant and managerial staff	30.8	69.2
Building electrician	100.0	0.0
Refrigeration technician	100.0	0.0
Administrative staff	0.0	100.0
<b>Total</b>	<b>68.8</b>	<b>31.2</b>

Typesetting and managerial support enjoy a more balanced gender distribution, their broad training profile leading to a variety of occupational outcomes. They are often linked to the newer occupational areas, which may explain why they more easily avoid male and female stereotyping and the codification of what is traditionally expected of girls and boys.

### **Position in the social milieu**

Since there is a close and dynamic relationship between the condition of the family of origin and the social condition of the young people themselves, the research sought to identify certain characteristics of the household that would help to explain the young people's educational pathways so far and those planned for the future.

The aim was therefore to understand the position of the young people in the social milieu of origin, using as indicators educational backgrounds (parents' level of education) and socio-professional

resources (parents' occupation and situation in that occupation, used to classify the trainees' households in the social classes of origin). These, as António Firmino da Costa states (1999, p. 224), are substantively connected to the central nature of the occupational area and the education system in structuring contemporary social relationships and the differential distribution of individual, family and group resources, powers, attributes and opportunities.

The analysis of levels of education of trainees' parents echoed the findings already outlined in other research: most of the young people come from family groups with very low levels of education, over half this population having failed to progress beyond the second cycle. The small percentage that reached secondary education (the current level of the young people surveyed) and higher education should also be noted.

Table 3. Levels of education reached by the father and mother (%)

	Father	Mother
Did not complete 1st cycle	11.1	10.8
Basic education – 1st cycle	33.7	31.2
Basic education – 2nd cycle	11.8	15.1
Basic education – 3rd cycle	18.3	22.6
Secondary education	10.4	11.8
Intermediate or higher education	8.2	5.7
Doesn't know/doesn't answer	6.5	2.9
<b>Total</b>	<b>100.0</b>	<b>100.0</b>

This analysis appears to underscore the notion that a large majority of these young people are seeking to be upwardly mobile in comparison with their parents. It should be pointed out, however, that intergenerational upward educational mobility does not necessarily mean intergenerational upward social mobility. Increasing school enrolment rates together with a devaluation of qualifications and an increase in the number of years of compulsory education, which obviously reproduces the relative positions, requires educational capital to be increased if the relative position in the social structure is to be preserved (Bourdieu, 1979; Bourdieu and Passeron, s.d).

The next step was to analyse the household, taking account of the family socio-professional indicator <sup>(12)</sup> and the interdependen-

<sup>(12)</sup> The guidelines set out by António Firmino da Costa (1999) were used to construct the family socio-professional indicator of the class locations of households.

cies established among themselves and with the various dimensions examined with a view to an approximate characterisation of trainees' social class origins.

Table 4. **Social class (family socio-professional indicator) (%)**

Entrepreneurs, executives and professional	13.6
Technical and managerial staff	9.3
Self-employed	5.0
Multi-activity self-employed	7.2
Multi-activity self-employed farmers	0.4
Unskilled workers	28.0
Manual workers	11.1
Agricultural workers	0.4
Multi-activity unskilled workers	22.2
Unclassified	2.9
<b>Total</b>	<b>100.0</b>

It can be seen from Table 4 that the social composition of this population, ascertained by means of this family socio-professional indicator, includes a considerable weight of multi-activity families involved in multiple socio-professional areas, with a greater incidence of multi-activity unskilled workers, which includes both unskilled and manual workers (22.2 %), or in other words, situations reflecting low qualification employment.

The multi-activity self-employed, corresponding to 7.2 % of families, include situations in which trade coexists with unskilled or manual workers.

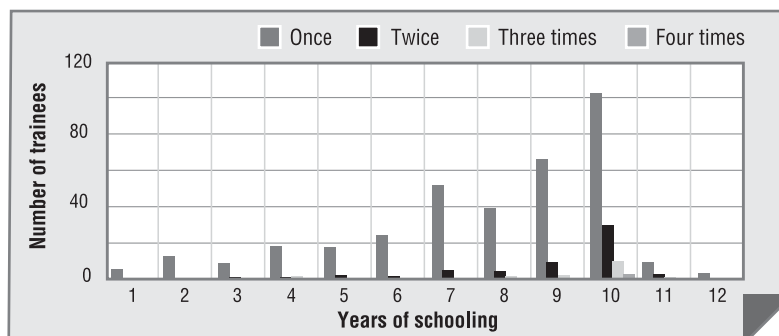
Over half the trainees' families are found in the low qualification and subordinate employment segment (unskilled and manual workers, agricultural workers and multi-activity unskilled workers) (61.7 %), supporting notions according to which children from lower social classes with less educational capital tend to opt for this type of training.

### **Educational pathway**

To understand how the schooling processes of these trainees have developed, their educational pathways were analysed in the light of the impact that failure and interruptions and the reasons for them had on their perceptions of their educational and professional future.

Educational failure is a dominant occurrence for these trainees, 90.7 % of whom have already experienced the need to repeat a year at least once. It was also noted that although this arises throughout the educational pathway, failure is more prevalent and sometimes a recurring phenomenon from the end of the first cycle in particular.

Figure 1. Number of repeats per year of education



These results suggest that gaps in schooling appear from the first cycle of basic education, even though they are not reflected in very high failure rates at this level. These shortcomings become more marked in the second and third cycles, culminating in an extremely worrying situation in secondary education <sup>(13)</sup> (Azevedo, 2002).

Since they originate from family backgrounds with fewer resources and low educational capital, these young people do not appear to have a range of abilities allowing them to adapt easily to the knowledge school requires. While educational inheritance alone does not determine the development of social strategies during educational pathways, its influence on the probability of this being the case cannot be overlooked.

Together with educational failure, interruptions in studying were also used as another indicator to help to explain young people's difficulties in adapting to the requirements of school, and in school responding to the needs of an increasingly heterogeneous public.

The data show that over a quarter of those surveyed (27.2 %) decided to interrupt their studies at a particular moment, this being common both to boys (29.2 %) and girls (23 %).

The reasons given and the degree of importance attributed show

<sup>(13)</sup> The low failure rates recorded in the 11th and 12th years are related to the small percentage of these trainees that reached these levels of schooling, confirmed by the recurrence of repetitions in the 10th year, which make this year a difficult stage to get through.

that they were influenced mostly by the fact that they had had a job opportunity, followed by lack of recognition of the usefulness of the apprenticeship and dislike of studying.

The influence of the education process on young people's reasons for deciding to start studying again must be interpreted as the result of the selective effect the educational institution has on its public. Young people actively construct and reconstruct their biographies and strive to influence their outcomes. This is the 'yo-yo' generation (Pais, 2001), which has experienced the most varied situations: some young people leave school prematurely in the expectation of beginning a professional career, but eventually go back because of the difficulty of finding work.

### Trainee choices

It is also known that young people's educational choices, considered to be an integral part of a future project, arise out of a range of possibilities in which elements such as family, sociability and the school form a dynamic and specific framework (Mateus, 2002). In that light, this research sought to analyse the reasons underlying trainees' choices.

Table 5. **Reasons for opting for the apprenticeship system** <sup>(14)</sup> (%)

To learn a profession	36.2
An easier way to obtain the 12th year	38.0
To earn some money and do the 12th year at the same time	12.9
To get a job more easily	17.2
To undergo more practical training	19.4
Having failed several times in their educational career	2.5
Being advised to do so by the school careers guidance service	5.7
Being encouraged by parents	4.3
To be better prepared to enter higher education	6.8
To be better prepared to enter the world of work	54.5

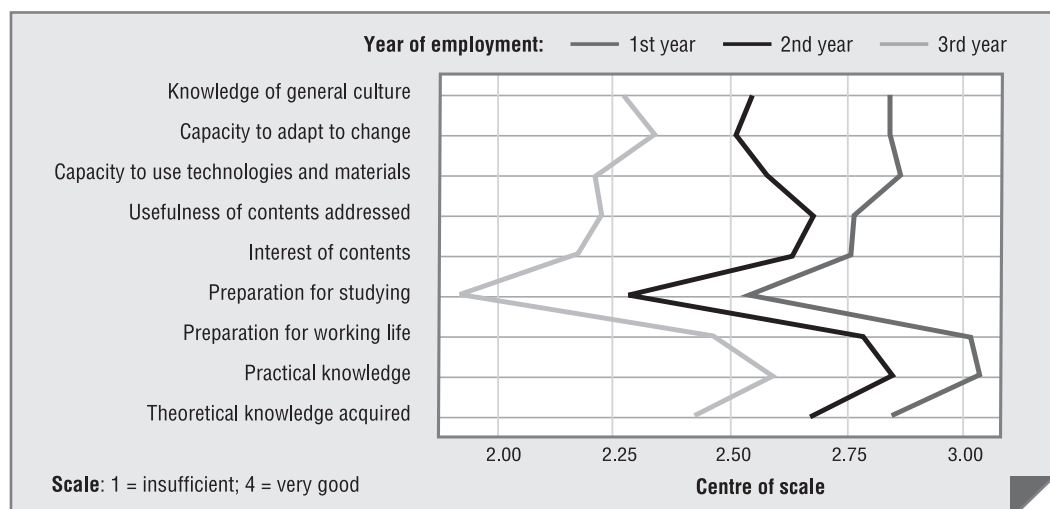
<sup>(14)</sup> The questionnaire asked for two reasons.

Besides learning a profession (36.2 %), the trainees know that it is important to be well prepared to enter the world of work (54.5 %). This seems to bear witness to a broader awareness which is consistent with uncertain and changing times. An instrumental significance is therefore clearly connected to this choice and extends in particular to the link between school and working life – better preparation, an easier way to get a job and the learning of an occupation. This concern is also mirrored by an underlying need to obtain educational certification and equivalence: 38 % of those surveyed say that they chose this type of training because it was an easier way to obtain the 12th year, while 12.9 % say that they chose it to be able to earn some money and do the 12th year at the same time.

### Opinion of the course followed

The trainees surveyed generally had a very positive opinion of the aspects selected to provide a generic description of this type of training, considering practical knowledge and preparation for working life to be the most positive, and preparation for studying to be the least positive. It was also noted that from the first to the third year, the evaluation made of all aspects deteriorated, the greatest difference in average results occurring in the capacity to use technologies and materials and preparation for studying.

Figure 2. Evaluation of training course (average)



These data seem to suggest that there is an inverse relationship between the evaluation of the training course and the year of enrolment, the most discontented and most critical trainees mainly being those in the third year, evidencing a certain fall in the expectations created when training began. There was significant despondency even in criteria that had led the trainees to choose this type of training, such as preparation for working life.

### **Trainees' perceptions and expectations for the future**

Entry into the labour market and the prolongation of schooling intersect in these young people's future plans. Although most intend to get a job within their area of training, a very substantial number would like to enter higher education, even if this means combining education with a job.

Table 6. **Educational and professional plans (%)**

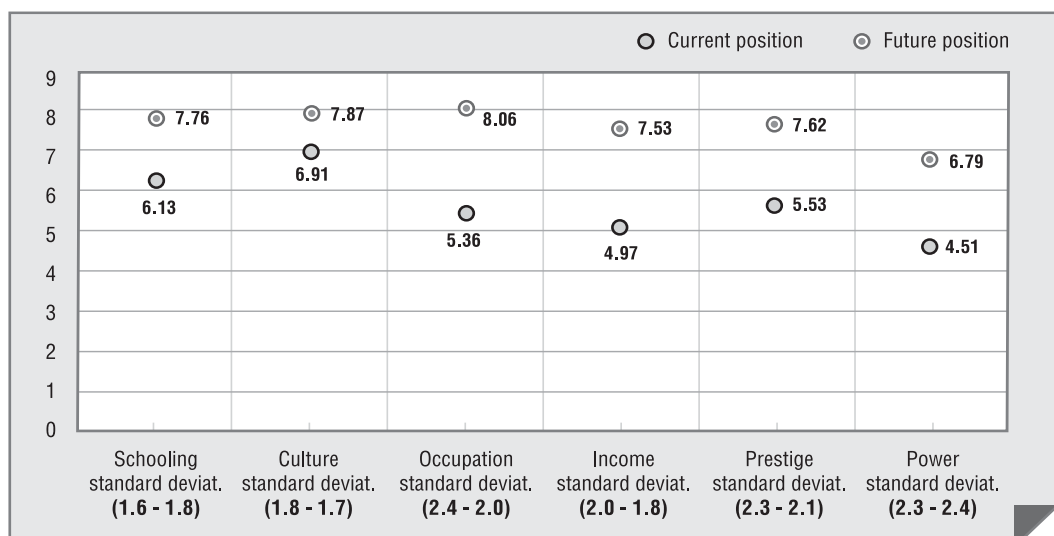
To enter higher education as full-time students	5.7
To enter higher education and work at the same time	26.2
To get a job in their area of training	55.2
To get a job in a different area	5.7
To do other training in a different area	4.7

Another aspect relevant to the analysis of these young people's perceptions was to see how level III apprenticeship trainees are represented in certain symbolic dimensions of social standing. The model presented by Mauritti (2003) in a study carried out with young university students was followed to this end.

The young people surveyed were also asked to evaluate themselves according to two equal blocks of indicators (dimensions of stratification involving education, culture, occupation, income, prestige and power), one relating to social positions they feel they have in the current context and the other to the future (20 years hence). Hierarchical scales of social importance were used in which 1 corresponds to the lowest point and 10 to the highest. The average positions for each indicator were then calculated.



Figure 3. Representations of social position (average)



The average values represented in the diagram show that in relation to current positions, there is a differentiation between the various dimensions, with culture and education playing a crucial role in how these trainees see themselves in the social environment. Their expectations in relation to their situation 20 years hence are higher than their current expectations, though they maintain the same profile, in which occupation, culture and education are in evidence.

As regards *occupation*, the dimension in this study in which the young people have greater expectations of improving their position, the instrumental effectiveness this type of training reflects in their professional expectations seems to be confirmed. Whether by means of the equivalence of educational attainment provided by studying, or the vocational qualifications acquired by means of the training and which provide them with a more highly qualified position in the world of work, what is certain is that these young people envisage a very high-level professional future for themselves 20 years hence.

According to the positions as a whole, it can be concluded that educational and cultural resources (dimensions in which average positions are high) seem to lead to professional opportunities which in turn bring the other dimensions with them: income, prestige and power.

## Approaches and expectations of the enterprises

### Dimension, branch of activity and markets

In terms of *dimension*, the vast majority of the enterprises covered by this study (91 %) are small and medium-sized (SMEs) <sup>(15)</sup>, most of which (71.2 %) employ fewer than 50 people. This is typical of the Portuguese business fabric: mainly SMEs with simple organisational structures which are generally run by the majority shareholder, who has a low level of education (Rodrigues, 1998).

Among the enterprises studied, only 16.1 % are ISO quality certified, virtually all of these being medium-sized or large.

It is therefore legitimate to ask whether structures appropriate to this type of training exist at enterprise level. The need to adapt the training model to the Portuguese business fabric could undermine certain principles underlying this training, particularly as regards developing the pedagogical value of on-the-job training. As stated in the CIDEDEC Report (1994), enterprises with endogenous resources envisaged in the spirit of the model are very limited in Portuguese business, which means that the apprenticeship system would not have been able to grow numerically if these smaller enterprises which are less well equipped for training and which have less capacity to provide it in-house were not gradually involved. This process is expressed in the number of apprentices per enterprise <sup>(16)</sup>, which tends to marginalise training in companies.

### Reasons for involvement in the apprenticeship system

Enterprises justify their involvement as a way of complying with what they consider to be their social responsibility, and also acknowledge that it is a more effective form of recruitment. Another important or very important factor is that it enables the policy of upgrading personnel to be implemented, though there are significant variations according to the size of enterprise.

As to how they are kept up to date with the operation of training, 71.4 % attribute this to the tutor, while only 57.1 % attribute it to regular contact with the vocational training centre. It should be noted that 5.4 % of those surveyed claim that they are not kept informed,

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<sup>(15)</sup> The definition of SME laid down in the Commission Recommendation of 3 April 1996 (OJ L 107 of 30.04.1996, p.4) was taken as a reference point. This defines the criteria for its classification: number of persons employed, annual turnover and independence. In this study only the criterion of the number of persons employed has been considered.

<sup>(16)</sup> In this study the average number of trainees per enterprise is 2.1.

attributing this exclusively to the tutor. This also becomes apparent when respondents are asked how involvement in training is manifested. Monitoring what trainees do in the enterprise, planning with the tutor and evaluation are considered to be more important. Less importance is attached to contact with the vocational training centre. This seems to suggest that a substantial proportion of enterprises operate on a largely autonomous basis, focusing the objectives on their own needs and neglecting the coordination necessary for the process to operate.

### **Evaluation of the training provision**

The representatives of the enterprises agree that the training provided is appropriate to labour market and enterprise needs and is adaptable to changes in employment and occupations. The smaller enterprises, however, are less optimistic, associating this training provision more with disadvantaged workers, and also considering it to be well designed in theory but exhibiting shortcomings in practice.

When asked what they consider to be the most positive aspect, the respondents unreservedly cite on-the-job training (80.4 %). This component is generally seen as a cornerstone of the success of the apprenticeship system, and is recognised as the crucial indicator of quality by means of which its external effectiveness is guaranteed.

Lack of coordination between the two components is also clearly in evidence. Although they acknowledge that the enterprises are not able to visit the vocational training centre to monitor the training process, some suggest that the centre should set up a monitoring committee for trainees in the enterprise.

A significant number of respondents in fact acknowledge that they are unable to express an overall opinion of the training process because they are unaware of many of the goals and activities associated to the training delivered in the training centre. This indicator, which is additional to those already mentioned, highlights a certain fragmentation of the training team. Besides its possible consequences for the teaching work, this reflects a worrying lack of coordination between training components if the link between them is seen as a desirable characteristic of this combined model. It is a sign of weak involvement in the system, which actually calls the principal goals and potential of on-the-job training into question.

It was noted that the representatives of enterprises pointed to lack of job market stability as an obstacle to job-seeking. Once again there was an awareness of the still little-monitored impact of a first job

market in which activities predominate over jobs (Azevedo, 1998). In the light of this uncertain and unstable scenario, Pais (2001) even questions the role of vocational training, arguing that it has not helped to eliminate or dilute some of the more negative aspects of the employment system, particularly the fact that it does not adequately respond to the problem of youth unemployment.

This becomes even more pertinent when it is noted that lack of appropriate educational preparation for performing an occupation and lack of experience are other obstacles indicated by the representatives of enterprises. On the one hand, the idea prevails that advanced vocational training is required that allows young people to rapidly master a complex job, while on the other it is acknowledged that despite its combined approach, this training may appear less attractive, clearly showing that work experience may predominate over the competitive advantages arising out of such training.

Interestingly enough, little over half the enterprises surveyed admit that they opt for a trainee of this type of training if they need to engage a new employee.

**Table 7. Choice of a new employee (%)**

A young recent level III graduate of the IEFP apprenticeship system	53.6
A young person with the 12th year of secondary education	1.8
A young recent graduate	8.9
A worker with proven experience	35.7

Although some positive views arise throughout the survey on the effects of training in the organisational and production framework of enterprises, 35.7 % would nevertheless recruit a worker with proven experience, despite the positive aspects of training.

In our opinion this is related to the fact that enterprises seek urgent answers for multifaceted problems. Short-term results therefore prevail over medium to long-term investment, which would require a willingness to create or to develop apprenticeship systems. These are the reasons given for the choices made by the respondents, who highlight work experience as a means of achieving operational outcomes in a short time span.

Enterprises that would opt for a young person who has recently completed the level III apprenticeship scheme justify their choice by citing the possibility of training a worker according to the enterprise's philosophy, and the fact that they are familiar with the young person's characteristics and potential. Once again the focus is on work

socialisation rather than on the positive aspects of the various training components. Since the period of adaptation to the enterprise is minimised and enterprises have the opportunity to test the young person's skills, recruitment is significantly less risky.

The high value placed on work experience, lack of knowledge of curricula and syllabuses and lack of faith in the training delivered in the training centre are also in evidence in respondents' answers.

### Perceptions and expectations of trainees

The representatives of the enterprises understand that the young people opted for this type of training mainly because of the need to obtain educational equivalence to the 12th year and because of the importance of preparation for the world of work.

Table 8. **Expectations as regards trainees' educational and professional plans (%)**

To enter higher education as full-time students	0.0
To enter higher education and work at the same time	12.5
To get a job in their area of training	75.0
To get a job in a different area of training	8.9
To do other training in a different area	0.0
To join the ranks of the youth unemployed	3.6

Those surveyed believe that the trainees opted for this type of training to learn an occupation and to be better prepared for the world of work, their short/medium-term plan being to get a job within their area of training. The convergence of expectations among those surveyed to some extent demonstrates the role of this type of training as a virtual promoter of an alignment of trainee outcomes: to conclude level III training and begin a professional career. It should be noted that none of the respondents expect these young people to enter full-time higher education, and only 12.5 % expect them to do so if it is combined with having a job.

Those surveyed generally agree that the young people have the basic skills required to enter the labour market and meet the requirements of enterprises, but they are less optimistic about their chances of promising professional careers. It is the larger enterprises which are more dissatisfied, having a less positive view of trainees' attributes.

## Conclusion

This type of training represents an opportunity for the education system, which faces high levels of failure and persistently high numbers of premature school leavers. Young people's willingness to prolong their schooling is a good indicator of the capacity of this training provision to attract many young people into education, thus providing scope for future plans and expectations to be (re)defined. This willingness may also be seen as a major challenge, since it suggests that the traditional incompatibility between vocational and academic courses should be viewed in a different light.

For the employment system too, which suffers from increasing youth unemployment and a lack of qualified and highly qualified intermediate personnel (Azevedo, 2003), apprenticeship can also be seen as an opportunity, since it is a training system that combines theory with practice.

Although observations and opinions favourable to a combined approach have been evident throughout this research, on-the-job training is underexploited, pointing towards a combination of employment and education<sup>(17)</sup> and the promotion of activities more characteristic of Taylorism.

These considerations become even more understandable when the findings of studies cited by Clara Correia (1999) are taken into account. These highlight the inconsistent arguments voiced by Portuguese entrepreneurs: on the one hand, they call for human resources qualifications in a climate of innovation and competitiveness; on the other, they continue to recruit people with lower levels of education, claiming that they do not know what training exists, or what its principal advantages are. Luís Imaginário (1999, 2000) also draws attention to the fact that the public and private sector labour market continues to recruit workers at the lowest cost, even if this means young people whose educational attainment is rudimentary and who are professionally under-qualified, disregarding the intermediate level qualifications awarded by the training system. Guerreiro and Abrantes (2004) likewise argue that Portuguese business is resistant to organisational change, and therefore to employing better qualified workers. The business class in general, with few qualifi-

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<sup>(17)</sup> According to Imaginário (1999, p. 26-27), this training 'typology' is limited to ensuring the coexistence of two different periods of activities, one in a training context and the other in a work context, but with no link between them. The learning environments and periods are independent of each other and take no account of trainee learning strategies in a perspective likely to favour the absorption of what has been learned.

cations, has relied on technological innovation and cost-cutting above all, and has resisted organisational change and training. In parallel and as a consequence, a different scenario is evident that separates us from other European countries (Grácio, 2000; Pais, 2001; Guerreiro and Abrantes, 2004): the fact that unemployment in Portugal affects young people with intermediate qualifications in particular.

This situation ultimately has a significant impact on the labour market's capacity to attract young people. The increasing demand for people with intermediate qualifications will therefore be a consequence of the development of a whole range of functions and of the appearance of new types of business organisation in Portugal (Azevedo, 2003).

Besides all the situations highlighted, this issue also concerns the socio-professional capital conferred by these courses, Guerreiro and Abrantes pointing out that its development has generated new problems and challenges, and it is now acknowledged that its complete success – in its dual role of meeting young people's expectations and work organisations' needs – also depends on closer cooperation with employers' organisations and secondary and higher education institutions. (2004: 67)

Having highlighted some of the general outlines of this study, certain core questions must be raised which may be relevant to the future of these young people: Will they find a job in their area of training? Will they get into the labour market at a professional level corresponding to their skills? Will they enter higher education? Will they be able to transfer what they have learned to new contexts?

Other questions relating more to education policy also arise out of these conclusions. If apprenticeship represents an opportunity for the Portuguese education system, how will it be able to overcome the limitations referred to and, on its own, find out how to achieve its aims, gradually becoming part of the social dimension of the new Community values?

Much more than an exhaustive list, the general considerations and questions set out here seek to systematise some of the inferences that have arisen throughout this research. Far from exhausting this issue, we would like these considerations and questions to raise further questions and issues in an ongoing debate.

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# Active ageing in a greying society: training for all ages

**Roger Hessel**

EU Social and VET policy expert, lecturer

European Institute of Public Administration – European Training Centre for Social Affairs and Public Health Care (EIPA-CEFASS), Milan

## Keywords

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social partners,  
employability, trainability,  
learning-conducive  
workplaces,  
specific training needs,  
horizontal life  
cycle approach

## SUMMARY

**With the ageing of society, policy-makers are aware of the need to retain older workers in employment. Across Europe, lifelong learning is increasingly important. Adults who remain active longer need (re-)training to maintain their productivity. However, vocational training tends to decline with age. The article analyses European employment policy developments, the ‘active ageing’ concept and life course changes, and examines the question of whether the productive potential of older people is substantially impaired by age per se. The role of the social partners regarding the possible benefits of vocational training for a high-skilled workforce is analysed. The article challenges traditional mindsets about older workers and advocates an age-neutral approach of vocational training: learning must become a habit that is not moderated by age.**

## Overview of the main labour market changes in Europe

### European employment policy developments

Labour markets in the European Union are experiencing substantial and rapid change. Key drivers include sophisticated technology and innovation, which increasingly facilitate the tradability of services. The revised *European employment strategy* has taken these developments into account and foresees a significant increase in the employment rate of workers. Increasing employment of all workers, in particular women and older people, is a key element of EU strategy for sustainable social security systems at the height of population ageing.

While the need to boost employment is an urgent issue of common European interest, employment policies – including vocational training programmes – come within the exclusive competence of the Member States and national social partners. Employment policies at European level remain vague about how to promote training programmes. With the *Open method of coordination* <sup>(1)</sup>, the European Commission encourages Member States to cooperate on social policy issues while taking into account the diversity of national situations.

According to the European employment guidelines, EU Member States should provide incentives for employees to retire later and in a more gradual way, plus incentives for employers to retain older workers, i.e. workers aged 55-64 <sup>(2)</sup>. The guidelines lay out different, but complementary approaches: employment policies should promote training, lifelong learning strategies and active labour market policy measures for everyone regardless of their age.

The focus of the European Employment Strategy is on raising employment, not solely on reducing unemployment. Increased employment of older workers is seen as a means of easing the burden of societal ageing and demographic change in Europe <sup>(3)</sup>. The two groups considered to have greatest potential were women and older workers. But while promoting employment opportunities for women has ranked high on the European Employment Strategy agenda from the very beginning, this has not been the case with the employment of older workers <sup>(4)</sup>. Since 2002, the European employment guidelines have included two quantitative targets for older workers, both introduced as part of the Lisbon strategy: the first is to raise the employment of older workers in the EU to 50 % on average by 2010; the second is to increase the effective average retirement age by five years by the end of the decade. EU average employment was 59.9 years in 2001; the target is 70 % by 2010.

In line with its objective of becoming the most competitive knowledge-based economy by 2010, the Lisbon strategy was reborn in

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<sup>(1)</sup> The new open method of coordination (OMC) was laid down at the Lisbon Council meeting in 2000. The summit proposed that this method should facilitate work on social protection 'as a means of spreading best practice and achieving greater convergence towards the main EU goals' in areas where Community powers are limited. See also: Pochet, 2001, pp. 291-307.

<sup>(2)</sup> Some 79.7 million older workers had a job or a business activity in the EU-25 according to a Eurostat survey of 2004, News Release 112/2005, 8 September 2005.

<sup>(3)</sup> European Commission Communication *Increasing the employment rate of older workers and delaying the exit from the labour market*, COM (2004) 146, March 2004.

<sup>(4)</sup> The first Employment guidelines for 1998 hardly referred to them.

2005 with its economic goals prioritised and a new focus on national 'ownership' and reform commitments (Pisany-Ferry and Sapir, 2006). The new strategy, widely known as 'Lisbon 2', further stresses the need for concrete structural labour market reforms combining market flexibility and security of working conditions. In its Annual progress report on the Lisbon strategy of 2006, the European Commission acknowledged that progress on growth is still uneven and the spotlight is now moving to delivery of results. The Commission has redefined the four priority areas to make investment in education and research the first, with the aim that it should be increased to 2 % of growth domestic product (GDP) from the current 1.28 % by 2010. Improving the adaptability of workers involves a broad range of actions, supported by the EU through legislation and Community funds <sup>(5)</sup>.

In January 2007, a new European Structural Funds programme began for 27 Member States. A new set of regulations governing the funds brings some of the biggest changes in over a decade. The European Social Fund (ESF) should contribute to achieving the objectives of the Lisbon strategy for growth and jobs. The new regulatory framework is more focused than the current one: the ESF will be a significant funding and policy tool for worker skills development.

An important part of the EU's social agenda 2005-10 was the European Commission's consultation on the need to review current labour law systems; this concluded at the end of March 2007. The *Green paper on modernising labour law to meet the challenges of the 21st century* <sup>(6)</sup> asked what role law and/or collective agreements might play in promoting access to training over the course of a fully active working life. The Commission is preparing a follow-up communication based on the responses received. It remains to be seen if the document will take on board the importance of access to training throughout the whole life cycle.

### **The active ageing concept**

Demographic changes in the 21st century are confronting European countries with a substantial challenge. These developments are part of a wider trend: the world in general is witnessing, or will witness, demographic ageing over this century. Age has an impact on the ability to work and research by the Finnish Institute of Occupational Health suggests that individual differences in work ability – a sum of indi-

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<sup>(5)</sup> The new European structural programme 2007-13.

<sup>(6)</sup> COM(2006) 708 final; see the EU Commission website:

[http://ec.europa.eu/employment\\_social/labour\\_law/green\\_paper\\_en.htm](http://ec.europa.eu/employment_social/labour_law/green_paper_en.htm)

vidual and work-related factors – depend on the type of work: ‘white collar’ office work or physically demanding work. The findings underline the need for individual arrangements in working environments when people are getting older (Ilmarinen, 2001; Reday-Mulvey, 2003). Proper training programmes and individual training incentives would also support the increased heterogeneity of the older labour force at a higher age. New forms of so-called end-of-career management must take these differences into account to avoid resistance from parts of the working community and the costly strikes that some countries have already experienced, for example among truck drivers, craftsmen and firemen.

The concept of ‘active ageing’ was originally developed by the World Health Organisation (WHO) and launched at the Second assembly on ageing in Madrid in April 2002. WHO offers the following definition: ‘Active ageing is the process of optimising opportunities for health, participation and security in order to embrace quality of life as people age’ (7). WHO underlines the close link between activity and health, suggesting how important it is to enhance the quality of life far into old age by maintaining mental and physical well-being throughout the life cycle. It is a preventive concept which means involving all age groups in ageing actively during the entire course of life. The focus is on enablement – restoring function and expanding the participation of older people – instead of disablement, the increasing needs of the elderly and the risk of dependence.

European institutions have also taken the active ageing strategy on board, with the notion being introduced in the guidelines for 1999 and 2000. In its active ageing strategy the European Commission emphasises a participatory approach giving citizens adequate opportunities to develop their own forms of activity. The focus is shifted from the elderly as a separate group and directed at all citizens, since everybody is ageing all the time. From 2001 onwards, ‘active ageing’ was given more prominence by making it a separate guideline. The 2001 guidelines stress the need for ‘in-depth changes in the prevailing social attitudes towards older workers (...) to raise employers’ awareness of the potential of older workers’, as well as a revision of tax-benefit systems to reduce disincentives and make it more attractive for older workers to continue participating in the labour market’. The Employment Taskforce’s report *Jobs, jobs, jobs: creating more employment in Europe* of 2003 paved the way for active ageing becoming a top priority for the EU. It remains to be seen if the active ageing approach will gradually help to replace

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(7) Website of WHO: [www.euro.who.int/ageing](http://www.euro.who.int/ageing)

today's glorification of youth with values of solidarity and a more age-neutral approach in employment and human resources practices. The European Commission's orientation towards active ageing policies, i.e. the strategy of mobilising the full potential of people of all ages, seems to be the right policy for the future.

## Continuous vocational training in the knowledge society

### **Adapting education and training for the knowledge society**

Globalisation and the consequent intensification of direct competition have had a large impact on work organisation, including on the quality of supplies. Vocational training practices and policies have to respond to changes in working conditions. The main developments in the late 20th and early 21st centuries have been characterised by the term 'knowledge society', though to date, there appears to be no clear definition of what the knowledge society might be (European Foundation, 2005). A useful way of thinking about the knowledge society, however, is that it involves several significant trends. The European Foundation for the Improvement of Living and Working Conditions tried to summarise the main trends in the *Handbook of knowledge society foresight* <sup>(8)</sup> as follows:

- the development of the information society based on the utilisation of new information technologies (IT); the information society appears to be a condition for a knowledge society;
- further to the implementation of information technologies, the increased importance of innovation as a source of corporate and national competitiveness;
- the development of service economies, where the bulk of economic activity takes place; more value can be generated by distribution, marketing and services rather than manufacturing;
- knowledge management, i.e. efforts by organisations to apply new information systems to make them more efficient by using their data resources and human resource development;
- the need for lifelong education and training, enabling people to become adaptable and to acquire new skills and knowledge (European Foundation, op. cit).

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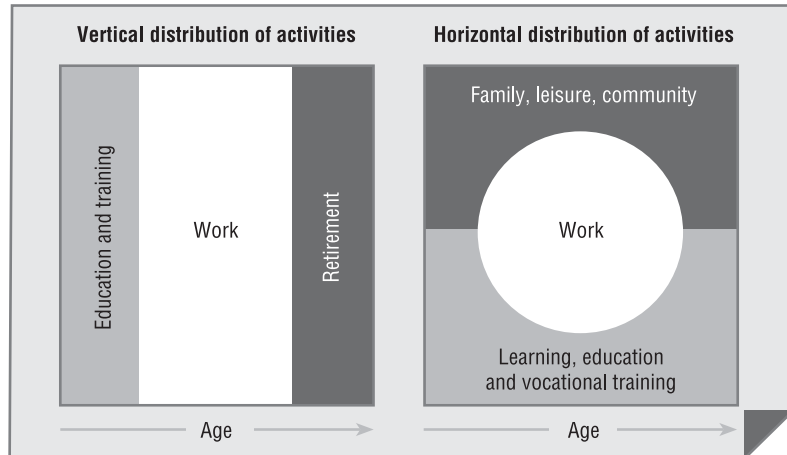
<sup>(8)</sup> The handbook was issued in 2003 and is available in electronic format only:  
[www.eurofound.europa.eu/publications/htmlfiles/ef0350.htm](http://www.eurofound.europa.eu/publications/htmlfiles/ef0350.htm)

The High Level Group, installed by the European Commission and chaired by Wim Kok, required urgent action regarding the knowledge society as one of five policy areas. In its mid-term review *Facing the challenge: the Lisbon strategy for growth and employment* (November 2004), the expert group recommended fostering lifelong learning for all and adapting education and training systems to the knowledge society. Investment in human capital thus becomes a condition *sine qua non* for future competitiveness. By extending training opportunities, making employees more employable, the stage can be set for more flexible and hence more productive employment systems. However, it appears to be crucial to extend (re)training opportunities until the end of people's careers and not to reduce them from the age of 50 onwards.

### **The horizontal distribution of activities during the course of life**

Most industrial societies have been experiencing a trend towards diversification and individualisation of leisure time activities and training patterns. Traditionally, citizens' life-cycles have been vertically divided into education, work and retirement. This perspective – deeply rooted in the citizens' mindsets – no longer corresponds to the course of life of today's workers. The transitions between the various stages of life have become more complex. Entering into the labour market and pursuing a career is often interrupted by periods of vocational training or maternity/paternity leave. Likewise, discontinuity through new employment arrangements, such as short-term project contracts or unemployment, plays an increasing role in work biographies (European Foundation, 2004). The demarcation between working as an employed wage earner and being self-employed has become difficult to draw in many countries. In addition, continuous vocational training has gradually become a common feature in modern working life.

Indeed, a new perception of the course of work/life is needed. In its *Green paper on demographic change*, the European Commission concludes that one of the key priorities for the return to demographic growth is to find 'new bridges between the stages of life' and to alter 'the frontiers (...) between activity and inactivity' (European Commission, 2004). In the past decade, large parts of the socio-economic research community began promoting a horizontal life cycle approach (see Figure below) (Reday-Mulvay, 2005, p. 21).

Figure 1. **Activities over life cycles**

Source: Reday-Mulvay, International Association for the Study of Insurance Economics (Geneva Association); further developed by the author.

To transform the horizontal life cycle approach into concrete, consistent practice, large advances must be made to implement and coordinate employment, family, social and financial policies. However, serious knowledge gaps still persist regarding new work biographies in a comparative perspective. Each generation ages differently. This is called the 'cohort factor' by sociologists: each cohort or generation is affected by its own history. It is therefore very unlikely that today's children will have the same sort of life cycle as today's adults. Correspondingly, social expectations of workplace training are inappropriate and take time to change. Society is still geared to the ageing patterns of the previous generation. Every generation perceives itself as justifiably different from the preceding generation, but plans as if the succeeding generation will be the same as their generation (see also Handy, 1995).

Research provided by the EU agencies in Bilbao (European Agency for Safety and Health at Work) and Dublin (European Foundation for the Improvement of Living and Working Conditions) indicate that older workers' employability can be enhanced by improving the quality of workplaces<sup>(9)</sup>. It was found that that older wage-earners in low-quality employment with limited training possibilities withdraw from the labour market before the statutory retirement age much more than workers who profit from extensive training programmes until the end of their career.

<sup>(9)</sup> According to Art. 137 para. 1 EC Treaty, the Community shall support and complement Member States' activities regarding working conditions.



In developing economic giants like China, governments are now trying to emulate the EU's vocational educational and training policy. However, the worries that highly-skilled European workers might lose their jobs to colleagues from the developing world seem to be exaggerated. The *McKinsey global institute* argues in a large-scale study <sup>(10)</sup> that only about 10-13 % of Chinese engineering graduates and highly skilled workers are currently capable of working for western companies in a high-grade job; at the moment their education is often inadequate. Language skills and intercultural competences are lacking; Internet penetration is low in the rural areas. Geography is also imposing limits: in large countries like China and India many graduates live far away from international airports and developed urban infrastructure <sup>(11)</sup>.

### **Less vocational training for older workers**

In the OECD member states, on average 26 % of employees participate in employer-sponsored continuous vocational training each year. Each participant receives on average about 68 hours of training per year (approximately nine working days). In all OECD countries, the incidence of training tends to decline with age: average training participation among workers aged 56-65 is about three-quarters that of workers aged 36-45 (OECD, 2003, p. 240-241). However, the country with the highest continuous vocational training volume (CVT) and the highest participation rate is Denmark, where workers receive on average 36 hours of employer-sponsored CVT per year. In France, since 2004 all employees have been entitled by law to an average of 20 hours' training per year <sup>(12)</sup>. Legislation also obliges companies to earmark financial resources for training purposes: the equivalent of at least 1.6 % of salary. In French companies, works councils have to be informed about the aim of the various training programmes.

In the Member States of the EU, only 10.8 % of workers and non-active adults participate in formal, non-formal and informal lifelong learning, a long way short of the EU benchmark of 12.5 % participation by 2010. The Member States with the highest attainment in lifelong learning are Finland, Sweden, Belgium, the United Kingdom

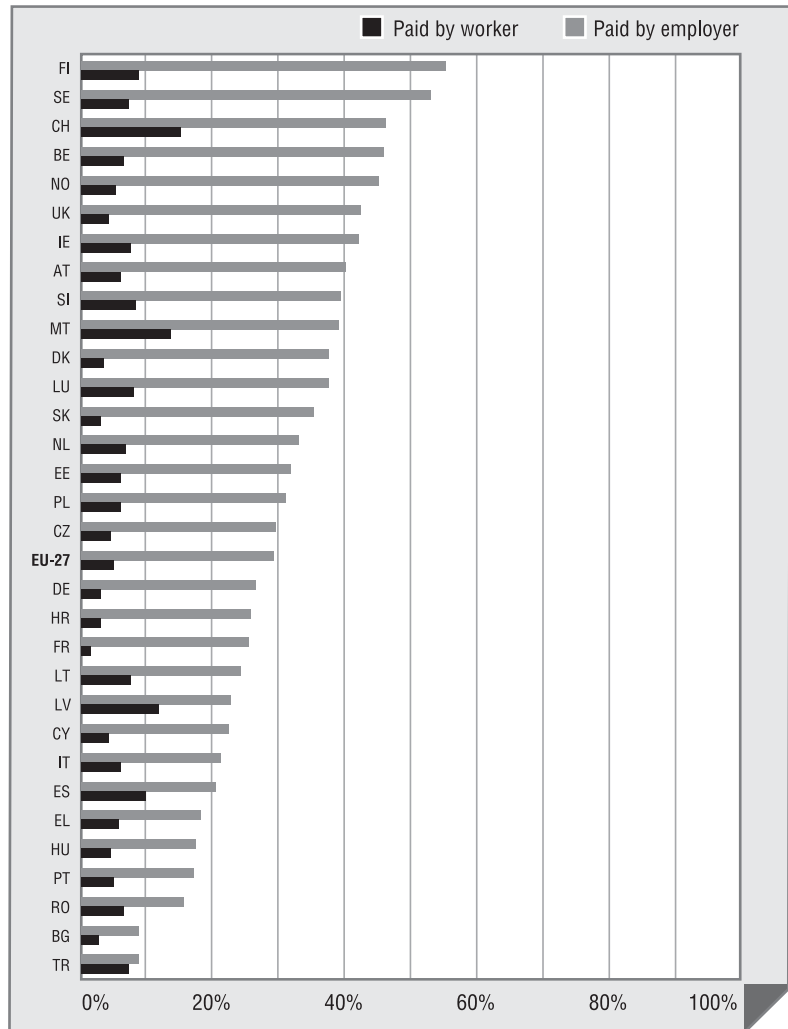
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<sup>(10)</sup> The Economist, 7 October 2006, p. 12.

<sup>(11)</sup> In comparison, India's difficulties have more to do with a limited scope of high-tech businesses and poor governance: the country's infrastructure is crumbling and the education system is clearly uneven. Graduate unemployment is 17 % at a time when information technology is booming.

<sup>(12)</sup> DIF – *Droit individuel à la formation*; the DIF is supposed to depend on the employee's initiative but the employer has a duty to initiate the training programmes required to maintain people in their job.

Figure 2. Percentage of employees who received training, by country (%)



Source: Fourth European working conditions survey, European Foundation for the Improvement of Living and Working Conditions (2007), p. 49.

and Austria (see Figure 2). In these countries, between 40 and 56 % of workers reported receiving paid training at work. The EFTA-countries Switzerland and Norway have also high training levels. In addition, 15 % of Swiss workers also pay themselves for training schemes. According to the *Fourth European working conditions survey* (European Foundation, 2007) <sup>(13)</sup>, less than 30 % of EU

<sup>(13)</sup> [www.eurofound.europa.eu/publications/htmlfiles/ef0698.htm](http://www.eurofound.europa.eu/publications/htmlfiles/ef0698.htm)

employees received any type of training at work in 2005. The levels of training have not increased in the past 10 years. There are, however, very substantial country differences. At the bottom of the league are most southern and eastern European countries, where the levels of training are very low, hardly reaching 20 % of employees in Spain, Greece, Hungary, Portugal, Romania and only 10 % of workers in Bulgaria and Turkey. Within the EU, expenditure on continuing training represents only 1-2.2 % of total labour costs.

Giarini and Malitza (2003, p. 9-10) postulate an interlocking system of learning and work, whereby workers in many sectors would alternate between education and work. According to this theory, active people would earn credits for both productive and non-productive periods during their life span to the age of 76. The distinction between work and education would blur, as credits for both would become increasingly interchangeable. Accomplishment in both areas would be evaluated and quantified. In addition to the usual degrees and diplomas, persons would earn 'stars' for continued academic accomplishment – with transferable credits from work. Over a lifetime of creative work and education, a typical person would accumulate credits – over a thousand of them for an academically ambitious person by the age of 76 – and a corresponding number of award stars.

### **Is it more difficult for older workers to learn?**

An important aspect of ageing and productivity is whether older workers have greater difficulty in learning new skills. Their educational needs are known to be different from those of younger people. Training for older workers must be designed to take full advantage of their experience and knowledge while introducing to them new ways of thinking and acting. 'Trainability', i.e. the ability to learn, is not easy to measure. However, the *International adult literacy survey* (IALS) <sup>(14)</sup> is an important source of evidence about the relationship between age, productivity and trainability. The IALS indicates that literacy skills improve with practice and deteriorate if not used: phases where workers disengage from learning tend to erode learning habits. A possible lower motivation of older employees to enrol in training activities is often falsely ascribed to their age.

Evidence proves that the productive potential of older people does not appear to be substantially impaired by ageing per se (Warwick Institute, 2006; OECD, 2006, p.2). Workers employed in a learning

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<sup>(14)</sup> The *International adult literacy survey* (IALS) is a seven-country initiative conducted in 1994. Its goal is to create comparable literacy profiles across national, linguistic and cultural boundaries; the survey offers the world's only source of comparative data on participation in adult education and training.

environment appear much less susceptible to a decline in trainability. A decline in performance may be due to skills obsolescence or a burn-out phenomenon which may occur at any age and can be remedied through appropriate training practices or adaptation of working conditions. Trainability is not age-determined but mirrors the work settings encountered during working life. Hence, training and retraining are important factors in enhancing the employability of older workers.

The trend towards early retirement seems to have slowed down or stopped in all European countries. However, reversing this trend is highly unpopular: delaying the effective retirement age – currently at approximately 60 years within the EU – to the statutory retirement age – 65 in several Member States – meets broad resistance. Some evidence suggests that continuous workplace training could encourage workers to stay longer in the labour market.

This theory is supported by the significant link between the level of education and retirement age. According to the Danish report *Seniors and the labour market* (January 2004), employment among persons aged 60-66 with a university education is 52 %, whereas only 16 % of persons in this age category whose education stopped after primary school are still working (see Table below). This gap increases with age. As more educated people reach 50 and 55, prospects for working later in life are improving.

Figure 3. **Employment rate by educational level and age in Denmark (%)**

	Aged	55-59	60-66	67-74
Primary school level		58	16	4
High school level (10-12 years of education)		75	30	5
Short higher education (12-14 years of education)		81	37	13
Medium higher education (15-16 years of education)		86	39	10
Long higher education (17-18 years of education)		91	52	19
<b>Total</b>		<b>74</b>	<b>27</b>	<b>6</b>

Source: Statistics Denmark, Copenhagen 2004 (European Foundation for the Improvement of Living and Working Conditions, online newsletter, news update: Denmark).

In many countries, increased flexibility in working-time arrangements has led to the creation of working-time accounts for individual employees. About one quarter of large collective agreements in the Netherlands, for example, include the possibility of saving spare time for educational purposes. An employer survey in western Germany reported that 11 % of all companies that offer training and operate working-time accounts offer the option of using the accumulated working-time capital for training purposes (OECD, *op. cit.*, p. 265-266).

### **The role of the social partners**

Social dialogue, i.e. communication between the social partners <sup>(15)</sup>, is a key component of the EU's employment policies. According to the principle of subsidiarity, decisions should preferably be taken at local, decentralised level. Due to the closeness to working life, social partners are best placed to understand the specific needs of employers and employees and to design and implement appropriate lifelong learning strategies <sup>(16)</sup>. In employment policy, management and labour is often the most appropriate level of action: when social partners agree on common solutions, they have a better chance of succeeding because the compromise has a more widespread support (Welz, 2007). The role of the social partners should be taken into account when seeking to enhance awareness of workplace learning and its benefits. Successful vocational and adult training schemes are often based on partnerships between business, the public sector, social partners and local third sector organisations: they focus on specific target groups and their individual training needs.

From the trade union side, there is empirical data that unionised employees receive more training than those who are not members of trade unions. Trade unions can improve training outcomes by systematic promotion of learning-conducive workplaces which release the learning potential of employees through an efficient combination of formal, non-formal and informal learning (European Commission, Dion, 2006, p. 38). However, trade unions themselves are often 'ageing' in the sense that union members maintain their membership even after they retire. This is the case in countries such

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<sup>(15)</sup> See the definition of the European Foundation's industrial relation dictionary under [www.eurofound.europa.eu](http://www.eurofound.europa.eu)

<sup>(16)</sup> See websites of the European social partners: [www.etuc.org](http://www.etuc.org); [www.unice.org](http://www.unice.org); [www.ceep.org](http://www.ceep.org); [www.ueapme.com](http://www.ueapme.com)

as France, Germany, Italy and Spain<sup>(17)</sup>. According to Tito Boeri, economist at Bocconi University in Milan, Italian trade unions have more retired people than working members<sup>(18)</sup>. As a consequence, the retired trade union representatives in these countries should be aware of the need to promote modern learning-conducive workplaces which they might not have experienced during their own careers.

The EU is supporting the role of social partners in the new Member States and the candidate countries<sup>(19)</sup>. Their expertise is required to implement the *acquis communautaire*, i.e. the complete body of EU legislation. In these countries, however, social partners are rather weak, heterogeneous and fragmented. For example, in Romania, five national trade union organisations coexist while for Hungary the figure is six. Bulgaria and Poland continue to be characterised by dual trade unions (bipolarism)<sup>(20)</sup>. Discussions between business and workers are underdeveloped at sectoral bipartite level. Trade union membership in Turkey, for instance, is approximately 7.5 %, much lower than the approximately 42 % of the EU as a whole.

When analysing the case of Finland, an example of a highly competitive economy, a consensual style of dialogue between government and strong employers' and employees' organisations can be observed. Until 40 years ago, Finland was mainly known for its endless forests and the paper and gum industry. Today, Nokia has 32 % of the global cellphone market. Evidently, a strong social dialogue culture is not an obstacle to this success. Correspondingly, the candidate countries, and also some of the central and eastern European Member States and neighbouring countries, have to invest time and money in capacity building to create an efficient social dialogue framework at local, regional and national levels. In some new Member States, well-structured workers' organisations have only recently started to get established. In the Czech Republic and Slovakia, for instance, traditional 'enterprise councils' were dismantled, because they were considered as a 'relic of socialism', or because they met with strong opposition from local trade unions.

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(17) In France, every trade union has institutionalised unions for retired members, the *syndicats des retraités*. In Spain, employees can maintain their trade union membership after retirement. Nevertheless, they can only participate in the collective bargaining as advisers without voting rights; they cannot be included as candidates to participate in the public administration's representative body elections.

(18) *Financial Times* of 12 November 2003.

(19) Article 137 EC Treaty stipulates in paragraph 1 that the 'Community shall support and complement the activities of the Member States (...) representation and collective defence of the interests of workers and employers, including co-determination'.

(20) European Commission, DG EMPL, *Industrial relations in Europe*, 2004, p. 95.

On the other employers' side, central and eastern European countries have only a short tradition of bargaining due to the complete reorganisation of their economies after the collapse of the Communist regimes. While trade unions are often ready to enter into collective bargaining, employers often are not. In some rural regions of Turkey, the employers' side is still completely missing. In the Czech and Slovak Republics and Poland, however, the government provides considerable assistance to the creation of employers' organisations.

Today many companies are not much in favour of providing older workers with training. Training time is often considered 'lost' as it reduces the time in which the worker can be 'productive'. This view – though convincing at a first glance – seems to be short-sighted: there is substantial evidence that when companies decide to invest in appropriate, tailored, quality training they are compensated by mid and long-term benefits of higher skills and consequent better job performance <sup>(21)</sup>. There is clearly a cost involved in upskilling staff, but the cost of inaction is, in most cases, greater.

The social partners can promote learning environments by the implementation of personnel and organisational measures for a modern age-management. They should take into account the characteristics of older employees such as their education and learning histories: workers who are not used to continuous learning might be afraid to engage in training. These fears need to be acknowledged and competitive learning situations must be avoided. Both employers and trade unions should support training measures which take into account that the learning pace varies substantially between individuals. Self-paced learning should be promoted.

Good practices within IT-supported learning initiatives should be promoted. For instance, the eLearning programme 'i-AFIEL' (Innovative approaches for full inclusion in eLearning) <sup>(22)</sup> created by the European Commission in early 2007 and run by partners such as the European Institute of Public Administration (EIPA) and the Spanish Region of Valencia is using IT services for lifelong learning focusing on less advantaged social groups (eInclusion).

The machine tools sector of Germany reports that it owes a large part of its international success to the experienced-based 'innovative milieu', founded on cooperation between older workers and new recruits (Cedefop, Dworschak et al., 2006). Social partners

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<sup>(21)</sup> Warwick Institute for Employment Research (University of Warwick), Economix Research & Consulting Munich, op. cit., pp. 200-202.

<sup>(22)</sup> See the website [www.iafiel.gva.es](http://www.iafiel.gva.es)

should disseminate good sectoral practices of age-mixed teams. Inter-generational transfer of know-how is a key issue for companies since it triggers competitive business advantages. Further initiatives are needed to develop sensitivity and accreditation of workforce diversity in management policies.

A significant proportion of training costs is borne by employers. Social partners should therefore influence governments to introduce tax deductions to stimulate lifelong learning financed by individuals.

Finally, the vocational training market is rather complex in most countries, judged by its capacity to deliver on skills scarcity in the labour market. There is significant room for better performance monitoring of training providers by social partners and other stakeholders. The better the assessment of quality of training programmes, the more the training offer can be used to ensure that workers will be equipped with the right skills.

#### **A refocused European framework: matching labour market needs and training provision**

Since Europe is characterised by a great diversity of training systems, the European Commission has recognised the need for increased transparency of worker qualifications by developing a European qualifications framework (EQF) <sup>(23)</sup>. The core element of this framework is a set of eight reference levels which will act as a common reference point for education and training authorities at national and sectoral level. The eight levels cover the entire span of qualifications from those achieved at the end of compulsory education and training to those awarded at the highest level of academic, professional and vocational education and training.

The description of the EQF reference levels is based on learning outcomes in the EQF, understood as the statements of what a learner knows, understands and is able to do on completion of a learning process. Research findings reveal that learning situations need to permit older learners to make links with previous working experience. The training should take account of the worker's practical interests so that what is learnt can be used in practical problem-solving tasks. The focus on learning outcomes reflects an important shift in the way education, training and learning is conceptualised and described. This policy change introduces a common language allowing qualifications to be compared according to their content and

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<sup>(23)</sup> Proposal for a *Recommendation on the establishment of the European qualifications framework for lifelong learning* (COM(2006)479 final), 9 September 2006; see also the Commission's website: [http://ec.europa.eu/education/policies/educ/eqf/index\\_en.html](http://ec.europa.eu/education/policies/educ/eqf/index_en.html)



profile and not according to methods and processes of delivery.

At the ministerial meeting in Helsinki on 5 December 2006, the European Ministers of Vocational Education and Training (VET), the European social partners and the European Commission reached the conclusion that more attention should be paid to the image, status and attractiveness of VET <sup>(24)</sup>. As a further European tool paving the way towards a European VET area, the *Helsinki communiqué* emphasises the development of the European credit system for VET (ECVET) <sup>(25)</sup>. Since vocational education and training does not fall under the exclusive competence of the Community, the task will now be to improve coordination and trust between the stakeholders at sectoral, national and European levels and to implement the objectives of the Copenhagen-Maastricht-Helsinki processes.

Complementing the debate related to the *Green paper on modernising labour law* (European Commission, 2006), the European Commission in June 2007 published the communication *Towards common principles of flexicurity* <sup>(26)</sup> proposing a set of common principles on how to create more and better jobs. The paper suggests a broad approach on what is meant by flexicurity, defining it as an integrated strategy to enhance at the same time flexibility and security for workers and companies. Flexibility is 'not limited to more freedom for companies to recruit and dismiss'; it is more about 'successful moves during one's life course' such as the education-work-transition, from one job to another, between unemployment and work, and from work to retirement. Security, on the other hand, is about 'equipping people with the skills that enable them to progress in their working lives'. The Commission and Member States have reached consensus that flexicurity policies can be implemented across four policy components. One of the components encompasses 'comprehensive lifelong learning strategies to ensure the continual adaptability and employability of workers' <sup>(27)</sup>. Also the OECD defines a high level of participation in lifelong learning as a core feature of the flexicurity concept (OECD Employment Outlook, 2005). The Communication states that flexicurity policies encompass

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<sup>(24)</sup> *The Helsinki communiqué on enhanced European cooperation in VET*; see website of the European Centre for the Development of Vocational Education and Training (Cedefop): [www.cedefop.europa.eu/index.asp?section=3&read=2198](http://www.cedefop.europa.eu/index.asp?section=3&read=2198).

<sup>(25)</sup> [http://ec.europa.eu/education/ecvt/index\\_en.html](http://ec.europa.eu/education/ecvt/index_en.html).

<sup>(26)</sup> [http://ec.europa.eu/employment\\_social/news/2007/jun/flexicurity\\_en.pdf](http://ec.europa.eu/employment_social/news/2007/jun/flexicurity_en.pdf).

<sup>(27)</sup> The paper's three further policy components are: flexible and reliable contractual labour law arrangements, effective active labour market policies (ALMP) and social security systems that encourage labour market mobility and help people to combine work with private responsibilities.

training opportunities 'for all workers, especially for low skilled and older workers'.

The Commission's flexicurity concept recognises the need for labour market actors to become more responsive to socioeconomic changes in times where jobs for life no longer exists for the majority of the labour force. However, implementing the flexicurity concept and obtaining a better match of labour market needs and training provision responds to a number of challenges: flexicurity triggers substantial costs and seems to work only in highly-developed welfare states with generous unemployment benefits, moderate job protection legislation and high trade union coverage. Countries with a weak social dialogue culture or low rates of unionisation seem to face difficulties in finding the right balance between rights and obligations, thus creating the positive interplay between flexibility and security.

### **Conclusions and perspectives: vocational training for all ages**

With the ageing of the labour force, lifelong learning takes on increasing importance. Continuous training keeps peoples' minds sharp and their employability high. Increasing employment among the elderly means taking a lifelong perspective on the need for continuous vocational training; ensuring that across the labour market regular, tailored training becomes a habit for all ages. Training of workers aged 50-plus can both increase their productivity and defer their labour market exit. The social partners have a crucial role in promoting learning-conducive workplaces which release the learning potential of employees.

Regardless of whether decision-makers seek to promote access to training, active ageing policies or flexible working time practices, if they want to involve more elderly citizens in the labour market, the focus should not be limited to the 50-plus age cohorts. Ageing in a healthy way means being active and receiving continuing training input throughout the life cycle. Work adaptability and employability means upskilling and adjusting competences from the beginning of a career path. The above policies can only be successful if they are accompanied by measures that increase the employability of older workers: a holistic policy of change management is needed <sup>(28)</sup>.

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<sup>(28)</sup> Regarding suggestions bringing in line the productivity of older workers and related wages policies, see: OECD 2005, p. 5-6, op. cit.

Age still reinforces the inequalities in access to continuing training which separate wage-earners according to their socioprofessional group from the very beginning of working life. Training and the acquired learning outcomes should have a concrete impact on career paths: better links between training and career advancement would undoubtedly help to increase the desire for training at all ages. Such a prospect presumes a new approach to lifelong learning which would envisage training programmes at all ages in the function of qualification levels.

Measures aimed generally at those over 50, denying the multiplicity of strategies, objectives, employment conditions and, above all, career paths, cannot reduce inequalities and are even likely to aggravate them. Employability depends essentially on individual human capital. Paradoxically, efforts to change attitudes by promoting positive images of older people can end up reinforcing age-related stereotypes. Every statement that an older worker is more reliable sends out the message that younger workers are unreliable. The Employers forum on age (EFA), a network of leading British employer organisations, is promoting an even-handed campaign proclaiming that, in the long term, discrimination against younger workers could turn into the biggest issue facing employers <sup>(29)</sup>.

Further research is needed into continuous learning by older workers and the ways in which different sectors are affected by socioeconomic developments towards more knowledge-intensive processes. The employment problems confronting older workers are likely to intensify unless counteractive measures are taken and efforts made to establish age-appropriate human resources policies. Training and other work-related policies must become age-neutral, i.e. an attractive option for younger, medium-age and experienced workers alike.

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<sup>(29)</sup> See the EFA's website: [www.efa.org.uk](http://www.efa.org.uk)

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# Including people with disabilities into the workplace in the Balearic Islands

**Rosa Rosselló Ramón** and **Sebastià Verger Gelabert**

are Doctors of Education Sciences and lecturers in the Department of Education Sciences at the University of the Balearic Islands. Their main research area focuses on primary and secondary school students with special education needs and the inclusion of people with disabilities into the workplace and adult life.

## Keywords

Access to training,  
access  
to employment,  
community programme,  
handicapped worker,  
individual training,  
work attitude

## SUMMARY

**If education is an inalienable right for children and young people with disabilities, securing employment plays a key role in their inclusion into adult life. A broad study was conducted to analyse the transition between the end of compulsory education and the beginning of employment in young people with disabilities in the Autonomous Community of the Balearic Islands. This article addresses the two key issues that arise from the study: first, the basic elements that intervene in conceptualising the topic and, second, an evaluation of the current situation in the community.**

## Introduction

The issues of employment conditions and the quality of life of people with disabilities have been studied on several occasions, although the two topics have often been dealt with separately. Nevertheless, they are closely related, as adequate employment conditions have a positive influence on an employee's quality of life (De la Iglesia, 2006).

Although the direct relationship between each individual's skills and type and degree of disability and the possibilities of obtaining a job is obvious, the fundamental role played by education in providing employment opportunities under the least restrictive and

most productive conditions possible is also well known. To echo Pallisera (1996), education performs a double function: a sociological function that involves a change in an individual's status and their personal role, and a psychological function associated with developing personal skills and with the need for personal identity.

Training is particularly significant between the end of formal education and finding a first job, as it is accompanied by an individual transition from adolescence to adult life that aims to achieve autonomy and personal independence. This paper <sup>(1)</sup> focuses on the period between the conclusion of post-compulsory studies and inclusion into the workforce.

From this perspective, an analysis of the needs of people with disabilities in relation to developing their life processes is the most suitable point of departure for organising an educational offer that enables them to help themselves enter adult life. As Álvarez and Garcia (1997) asserted, two aspects should be considered when defining needs: the training received by subjects and the demands of the context into which they wish to integrate.

Different criteria and orientations have been used to organise and develop professional training for people with disabilities, which both the OECD-CERI (1991) and Pallisera (1996) group into six points:

- an evaluation and guidance stage that evaluates both employment skills as well as training;
- a dynamic policy to reinforce basic knowledge that organises training into individualised, modular systems and promotes teacher training;
- a policy of close relationships between companies and training institutions, which should be promoted to extend the alternative training modality;
- a policy to renew training content related to the spread of new technologies, which is fundamental;
- a policy of cooperation among institutions specialising in training material at the community level, which should be promoted;
- individual participation in developing training schemes, which is the key to enabling people with disabilities to feel involved in their training plans.

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<sup>(1)</sup> This article is the result of a broad, three-year research project conducted by the *Grup de Recerca Escola Inclusiva i Diversitat* (Education Research Group for Inclusion and Diversity) at the UIB, entitled: 'Analysis and optimisation of educational itineraries to improve the quality of life of people with disabilities', subsidised by the Ministry of Science and Technology (Official State Gazette, March 8, 2000).

Verdugo and Jenaro (1995) formulate a more detailed series of strategies for shaping the training practices used to prepare people with disabilities for employment.

1. identifying and practising work and tasks that reflect the community's current labour market;
2. training in skills that are critical for working efficiently;
3. training students inside the community;
4. using systematic instruction procedures to conduct training;
5. identifying adaptive strategies that encourage student independence;
6. reconceptualising the roles played by professionals and organisational structures;
7. involving parents in preparing their children for employment;
8. establishing the employment alternative that best suits a student's skills;
9. coordination and collaboration with adult services programmes.

Several of these strategies have been included in the country's legislative framework since Spain joined the European Union, as can be seen in agreements on professional training between the administration and social agents, such as the *Acuerdo de Bases sobre Políticas de Formación Profesional* [the basic agreement on vocational training policies], the *Acuerdo Nacional de Formación Continua* [the national continuing training agreement] and the *Acuerdo Tripartito Nacional de Formación Continua* [the national tripartite ongoing training agreement]. Further, Section 23.2 of the Public General Act on the Education System (1990) envisages organising social guarantee schemes that provide basic and professional training that enables students who do not successfully complete compulsory secondary to find jobs or continue their studies within the different alternatives of formal education, especially specific intermediate-level vocational training.

The goal of including people with disabilities into the workplace, and the general conditions that would enable that goal to be achieved, can be supported by three key premises:

- people with disabilities, like any other social group, are neither homogeneous nor uniform, but rather a diverse and varied group of people, in which each and every member has the same fundamental rights as other citizens. No one label encompasses an entire group; as diversity is an unquestionable fact; this is also true of the group of people with disabilities;
- the capacities of people with disabilities have some type of limitation that has more or less significant repercussions on their performances and activities. Nevertheless, it should be recognised



that in every case, these restrictions are accompanied by a series of capacities, possibilities and potentialities that can and should be developed. This is the point of departure for any action aimed at promoting the inclusion of people with disabilities, not from limitation or discrimination, but rather from integration and true equal opportunities, a challenge for society as a whole;

- the normalisation principle as a cohesive pattern and promoter of social action, aimed at terminating discrimination against, and the exclusion of the group of people with disabilities. This principle needs to be incorporated into society's general approach so that equal opportunities and the provision of resources allow the normalisation of life and the participation of all in society. This means offering options that enable participation and action.

These premises constitute the theoretical underpinnings of the general approach and actions that analyse the social and human status of people with disabilities in order to achieve social inclusion. This is based on non-discrimination and demands for the provision of the supports and aids required in enabling active participation in all areas of ordinary life. People with disabilities should have access to ordinary health, education, professional, leisure and social services, and the situations available to people without disabilities. To achieve this, discarding a segregationist and marginalising conception of this group in education, employment and all other spheres of life is necessary. The idea of disability policies as the sole responsibility of ministries or administrations should be changed to one in which people with disabilities are fully included in the general and collective responsibility of any government or administration; this is an issue that cuts across the mainstream.

These theoretical approaches should be translated into proposals for initiatives and actions that improve the quality of life and facilitate the social inclusion of people with disabilities. These proposals can be grouped into four basic types of action.

First are supports. In 1992, the American Association on Mental Retardation (AAMR) published a new definition of mental retardation (revised by Luckasson et al. in 2002) that included a new support-based action paradigm. A support is defined as any resource or strategy that promotes the interests and goals of people with or without disabilities and enables access to integrated resources, information and relationships in the family, education, professional and housing spheres, which leads to increased independence, productivity, participation in the community and personal satisfaction.

Supports are not only useful and necessary for people with disabilities, but also for anyone in need of a specific resource or

strategy to accomplish something. These aids can be provided by other people, ourselves, technology or community services. People with disabilities require natural and normalised supports and aids that allow them to accede to and participate in everyday activities the same way other people of their same age, sex and condition do. To accomplish this, the resources, strategies and means in each case which allow people with disabilities to overcome the barriers that impede participation as equals should be available as a social and normalised response. As Barton wrote (1998, p. 45): ‘... thus, a change in the objective of practice has taken place, which has gone from individuals and their insufficiencies to environments that increase disability and hostile social attitudes, because disability is not an abstract category, because it only and always occurs within a social and historical context that determines its characteristics’.

If individuals have access to adequate supports that enable them to address their needs, they are not handicapped; they are people with equal conditions; this must be the objective of all action at professional, personal and group levels.

Second is subsidiarity. This supports-related initiative poses three proposals and/or key consequences: subsidiarity at political level, general services at executive level and autonomy at personal level.

Subsidiarity is the objective of competential distribution; the application of this organisational principle is a clear instrument for distributing and regulating the exercise of competences. At the social level, this principle can be defined as one that begins at the individual, family, friends and community levels and successively reaches the local, autonomous and state government levels: each one of these becomes responsible only when the preceding level cannot efficiently satisfy a concrete need.

This involves a set of objective criteria on the attribution of competences and responsibilities, allowing limits and obligations to be established at different levels of power and administration based on a single criterion: the principle of maximum efficiency.

Third are general services. All ordinary, general and social spheres must have the necessary and appropriate supports available to provide people with disabilities with the same opportunities as the rest of the population to participate in activities, despite their disabilities and real limitations. This is a challenge that needs to be met by any public, legislative and/or social initiative.

It is clear that many people with disabilities require good quality help and supports, based on integration into society to prevent these supports from becoming a source of segregation and margin-

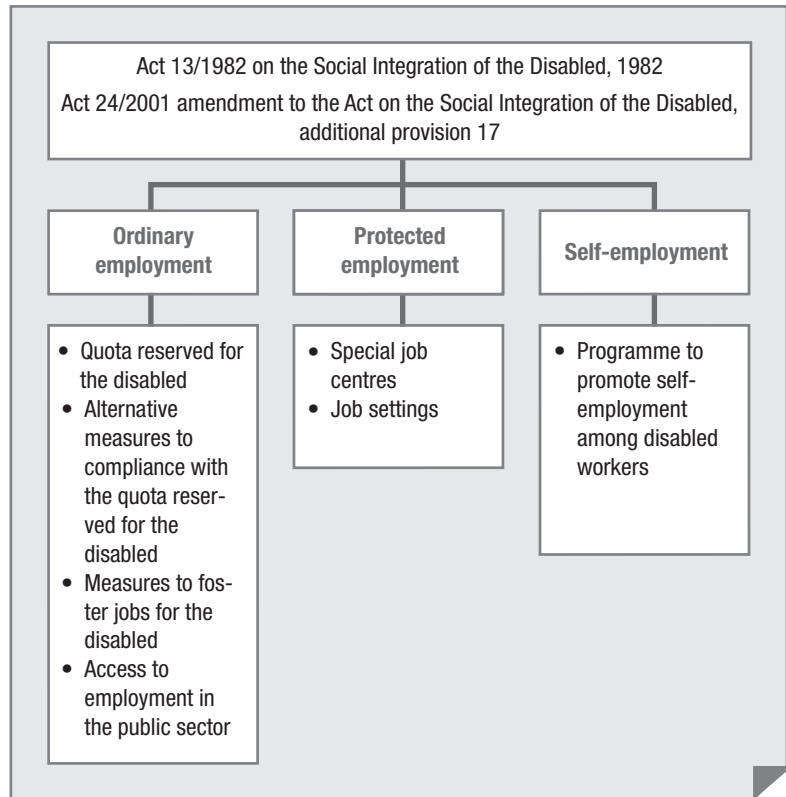
alisation. In this sense, people with disabilities should have access to good quality, ordinary health, education, employment and social services under the same conditions as others. This involves not only creating specific services for people with disabilities as a group, but also promoting their inclusion into general services in all areas of action: culture, urban planning, education, transport, housing, employment, health, sports, leisure, economic promotion, etc. The final objective is to avoid creating a false dichotomy between people with and without disabilities so that sufficiently broad, flexible services can be planned, organised, and executed to meet the ordinary, everyday needs of the entire population. The idea is not to think about offering services for people with disabilities that differ from those planned for the general population, but a service model that includes normalised and natural supports and ensures the equal participation of all in the benefits each service provides. This model requires learning to work not simply in favour of people with disabilities, but with and for them; a change in the attitudes of the public administration and authorities and technicians is a prerequisite in making progress in this direction.

Finally there is autonomy. The objective of all policies and proposals for action associated with people with disabilities should be the highest possible levels of autonomy. Social integration depends on levels of autonomy, which is far more closely related to levels of adaptation to the environment and access to technical aids and normalised supports than to the degree of disability.

Acting on the environment, modifying it so that it is accessible to all, also leads to a notable decrease in the need for technical aids and specific services, which would only be used in indispensable cases. Autonomy not only requires gradually and progressively taking advantage of opportunities to participate in activities, but also the resources and supports needed to develop autonomy within this context, not only to increase the quality of life of people with disabilities specifically, but also to the benefit of the population as a whole.

Spain, along with other EU countries, has developed plans, policies and regulations to foster the insertion of the disabled into both ordinary and protected work environments (special job centres and vocational centres) and encourage self-employment. All these plans have their origins in Act 13/1982 on the Social Integration of the Disabled (1982), amended in 2001 (Act 24/2001 amendments to the Act on the Social Integration of the Disabled, additional provision 17), as reflected in Figure 1.

Figure 1



Various regulations and legal texts have been developed for each one of these modalities:

- (a) Ordinary employment. Section 38 of Act 13/1982 of 7 April on the Social Integration of the Disabled establishes the so-called 'reserve quota', i.e. the obligation of public and private enterprises with a minimum of 50 employees to reserve the equivalent of 2 % of all posts for disabled workers.
- Further, there are several regulations that govern the types of contracts (permanent, full-time or part-time) that the disabled may have, some of the most important of which are:
  - Ministerial Order of 13 April 1994 which regulates the aid and subsidy grants to encourage jobs for disabled workers established in Chapter II of Royal Decree 1451/83 of 11 May (Spanish Official Gazette of May 5) Paragraph five in the final second provision of Act 40/98 of 9 December (Spanish Official Gazette of 10 December).

- (b) Employment in protected environments. Special job centres are enterprises in which all employees are disabled. The regulations that govern the operation of these centres are basically as follows:
- Royal Decree 2273/85 of 4 December (Spanish Official Gazette of 9 December 1985), approving the Regulations for Special Job Centres.
  - Ministerial Order of 16 October 1998 (Spanish Official Gazette of 21 November 1998), on aid grants.
- (c) Self-employed disabled workers. The Ministry of Employment and Social Affairs and the Programme to promote self-employment among the disabled have proposed a series of subsidies to finance entrepreneurial projects presented by unemployed disabled individuals who wish to be self-employed. These subsidies are regulated by Ministerial Order of 16 October (Spanish Official Gazette of 21 November 1998) which establishes the regulatory basis for granting public aid and subsidies to promote the integration of the disabled into special job centres or self-employment.

Because of these considerations, the study was structured around two key questions: the degree to which education has adapted to the needs of the labour market and whether training content fosters true inclusion. The ultimate purpose of the study was to improve the quality of life of people with disabilities by improving training itineraries, on the understanding that possibilities for full inclusion into the workforce are increased by doing so.

Many business and economic entities in the Islands can reap medium- and long-term benefits from the results of this study, both economically, through better-prepared employees, and socially, by offering more opportunities to people with disabilities.

## Study objectives and methodology

The study's objectives are described below:

1. to describe the formal and informal post-compulsory training offer currently available to people with disabilities in the Community of the Balearic Islands;
2. to identify disabled students enrolled in the different education options;
3. to ascertain and analyse the opinions of professionals involved in each training modality;
4. to analyse the business sector's demands for professional competences in people with disabilities;

5. to ascertain and analyse the opinions of people with disabilities on the training they receive and their conditions at work;
6. to define training indicators and contrast them with various instances in education, the people involved and different areas of the business world.

These objectives were investigated from both quantitative and qualitative perspectives. Various education agents were involved in the process as seen in Table I below:

**Table 1. Summary of objectives and methodology**

Objectives	Methodology	Material/subjects
1 & 2	data analysis	manuals, reports and official websites
3	questionnaires	teaching staff
4	in-depth interviews	businessmen
5	in-depth interviews	people with disabilities
6	discussion groups	all previous agents involved in the study

Note: the main interest is not analysis of statistical data from which the results can be generalised, but detailed analysis of specific situations and the results arising.

Achieving the first and second objectives involved preparing a double-sided database that included both the vocational training currently available in the community and a census of people with disabilities enrolled in each training modality.

Various sources of information were used:

- data on the training opportunities currently available in the Autonomous Community of the Balearic Islands, directly extracted from manuals published each academic year by the Government of the Balearic Islands' Council of Education <sup>(2)</sup>;
- data on all the people with disabilities enrolled in training options (post-compulsory secondary education, intermediate and advanced-level training cycles and Social Guarantee Schemes), provided by the General Direction of Educational Innovation and the General Direction of Vocational Training;
- the Government of the Balearic Islands' website, which posts all the courses offered each year and the public and private entities that run them;

<sup>(2)</sup> Centres in the Balearic Islands that offer training are public or private and are financed partially or totally by public funds.

- associations for people with disabilities and representatives of the trade union sector, which were contacted to ascertain the informal training offer;
- data from the INEM (National Institute for Employment) on the enrolment of people with disabilities in vocational schools and work and training centres.

To achieve the third objective, several questionnaires were designed for professionals who work in formal and informal training options available in Spain. For formal training these included post-compulsory secondary education, intermediate and advanced-level vocational cycles, social guarantee schemes, guidance services and *Programas de transición a la vida adulta* (PTVA) (Transition to adulthood programmes).

For informal training, the research covered vocational training, work and training centres, and community guidance services.

The questionnaires were sent to all relevant centres, though the response rate was not particularly high. The data obtained is shown in Tables 2 and 3.

**Table 2. Participation index for formal training options**

Total number of answered questionnaires				
Post-comp. secondary ed.	Training cycles	PGS	Guid.	PTVA
6	23	15	7	15
Percentage of results				
75 %	61.52 %	40 %	53.84 %	71.42 %

**Tableau 3. Indice de participation pour la formation informelle**

Total number of answered questionnaires			
FP	AP/CTF	Guidance services	
		General serv.	Specific serv.
12	13	5	2
Percentage of results			
43 %	40 %	30 %	50 %

The two tables show the total number and corresponding percentages of questionnaires received from each of the sample subgroups. It should be noted that the number of professionals attending to disabled students in certain educational spheres is low, hence the

relatively high percentages from a low number of direct scores.

Interviews were used in pursuit of the fourth objective, which was to analyse the demands of the business community. The *Mesa para la inserción laboral de personas con discapacidad con necesidad de apoyo* [the Roundtable for the Inclusion of People with Disabilities that Need Supports into the Workplace] <sup>(3)</sup> and the *Coordinadora de Minusválidos de Menorca* [The Handicapped Coordination Council of Menorca] provided their collaboration on this objective. A total of 23 interviews were conducted with different people from the business community on the Islands: 13 interviews in Mallorca and 10 in Menorca.

For the fifth objective, the Balearic Institute for Social Affairs (IBAS) provided access to the official database of employment statistics for all people with disabilities that live in this autonomous community. A total of 34 in-depth interviews (25 in Mallorca and 9 in Menorca) attempted to ascertain the opinions of people with disabilities on the training they received, conditions in the workplace and their quality of life.

Finally, discussion groups defined training indicators and contrasted them among the different agents involved in the study (people with disabilities, people from the business community and trainers). Representatives from organisations that train and hire people with disabilities, plus users of the different services, were invited to take part. A total of seven debates dealt with a variety of issues: proposals to increase sensitivity in social and business circles, formal training, informal training, job guidance, inclusion into the workforce and the business community's and users' viewpoints.

The information garnered from the discussion groups was analysed and used to complete partial reports that had been drafted in earlier stages of the study. Three final reports were prepared on formal and informal training options, the business community and the status of people with disabilities.

Shown below is a synthesis in two parts drawn from the conclusions of these three reports: the first focuses on reviewing the indispensable technical aspects of conceptualising the relationship between disability and placement in employment while the second offers a list of questions that reflect the situation and needs that shape the current panorama of employment training and placement.

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<sup>(3)</sup> The body in charge of aggregating in the autonomous community the relevant entities that develop supported employment programmes.



## Results of the study

It is difficult to synthesise all the results obtained because of the complex research process involved and the inherent constraints of a publication of this kind; thus, this article will only focus on aspects closely related to the article's topic.

### OBJECTIVES I-II.

*To describe current education options in the Autonomous Community of the Balearic Islands and identify disabled students enrolled in these options*

Education options, as in the rest of Spain, can be classified in two main groups: government-regulated education and education that is not government regulated. The following options belong to the first group:

- upper secondary education;
- intermediate and advanced vocational training (IVT and AVT, respectively);
- transition to Adult Life programmes (TALP);
- social guarantee programmes (SGP).

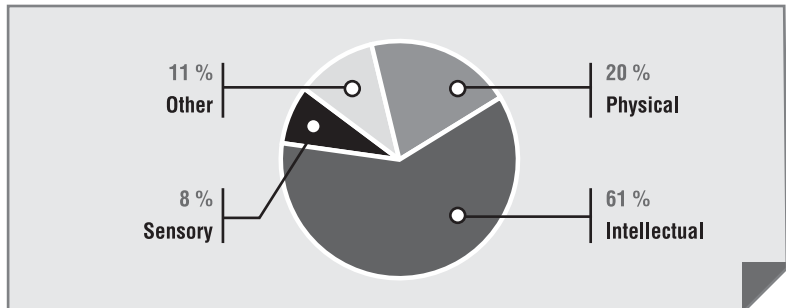
Both secondary education and the vocational cycles (IVT and AVT) are primarily taught at public schools and are the basic options for young people between the ages of 16 and 18; both types of education include specific measures that adapt study courses to students with special needs and facilitate access. However, in general, TALP are only available at partially regulated or private schools and aim to help students with major disabilities develop personal autonomy and facilitate social integration; they include a specific vocational training component. SGPs are unregulated initiatives that are nevertheless the education administration's responsibility and are available at schools or other public or private institutions (city councils, companies).

The second group encompasses unregulated options, organised through labour administrations, and includes several alternatives: occupational vocational training (which primarily focuses on kitchen, gardening and agricultural training), *Escuelas Taller* and *Casas de Oficios* (programmes for long-term unemployed youth lacking basic skills) and vocational workshops. These options combine work and training and are oriented towards public utility services of social interest (rehabilitating natural and urban settings, promoting artistic heritage).

According to the 1996 municipal census, the total population of the Balearic Islands was 760 370 inhabitants, 25 150 of whom were disabled, i.e. 33.08 per thousand with respect to the total

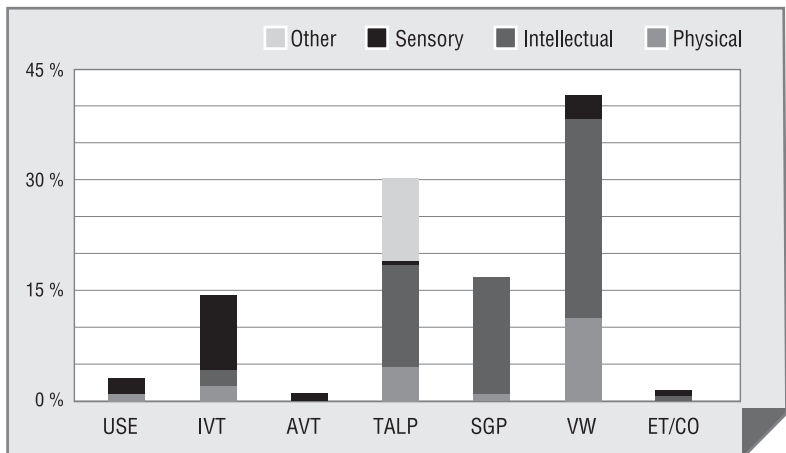
population. The population sub-group between 16 and 20 years of age was distributed as follows, by education option:

Figure 2. **Distribution of the population by type of disability**



The intellectually disabled are not enrolled in upper secondary education or advanced vocational training and very few of them study in intermediate vocational training programmes. In fact, this group is primarily enrolled in unregulated options and Transition to adult life programmes in special centres, which may be a serious hindrance to finding work in ordinary companies.

Figure 3. **Distribution of the population by education option and type of disability**



Finally, the graph highlights the fact that individuals with sensory disabilities are significantly represented in intermediate vocational training programmes, and that the category ‘Other’, which includes individuals with several disabilities or psychiatric disabilities, are only enrolled in Transition to adult life programmes.

### OBJECTIVE III.

#### *Opinions of trainers involved in each education option*

Professional assessments of the different education pathways varied greatly. All professionals agreed that SGPs achieve the best results, although they do not comply with the sectorisation principle. Study participants also agreed about the gaps in their training in teaching the disabled, as well as the difficulties they encounter in adapting pathways to each student's needs.

### OBJECTIVE IV.

#### *Demands from the business community related to the professional competence of the disabled*

In the Balearic Islands, 95 % of all labour contracts are promoted by associations for the disabilities that use supported work as a means of finding employment for the disabled. Businessmen cite interest, compliance with norms and criteria, and responsibility as positive aspects of their disabled employees' professional competences.

### OBJECTIVE V.

#### *Opinions of the disabled about training received and employments conditions*

The data obtained lead to the conclusion that two priority factors condition employment: training and type of disability. Whereas individuals with intellectual disabilities complete their basic compulsory education (and are later channelled towards social guarantee programmes, employment insertion programmes and, on rare occasions, intermediate-level vocational training), individuals with auditory sensory disabilities tend to enter training programmes and individuals with visual, sensory and motor disabilities, in greater numbers, continue upper secondary education, higher education study courses and university studies.

Not only do the possibilities of employment diminish at lower levels of education, but the jobs that are found also involve unskilled work and offer low pay, in line with the training required. Further, continuing education, especially in companies, does not take this group into consideration.

## From theoretical approaches to the reality of inclusion in the workforce

A series of needs have been detected as a result of reviewing the basic theoretical aspects of inclusion in the workforce and analysing the research; these must be corrected if people with disabilities are to be genuinely integrated into the workplace. At the same time, they reflect the current state of this issue in the Autonomous Community of the Balearic Islands as well as in the rest of most Autonomous Communities in Spain.

Many students with disabilities (mainly mentally retarded students) do not finish their education. This is especially evident in intermediate level vocational training and post-compulsory education. Further, 40 % of the teaching staff and 60 % of the guidance counsellors in the study admit that most students (40 %) do not obtain the necessary and appropriate professional training to carry out their future tasks.

Job counselling services are dispersed and professionals in formal education are not very familiar with them. This lack of information prevents existing employment resources and possibilities from being known and therefore limits counselling and the expectations of students with disabilities. Further, the training offer for students with disabilities is clearly much more limited.

General counselling services do not care for the needs of people with disabilities directly but tend to channel users to specific services. This accentuates the specific and restrictive character of these services and distances them from more normalised contexts.

One salient consequence of the two previous points is the lack of coordination between the networks of general and specific training and employment services, which also affects the needs of those involved.

Two important aspects of employment counselling have been detected: first, work and attention are excessively focused on transition periods; second, the process does not include developing basic social competences for inclusion into society and employment from an open and flexible point of view. This is stated by 60 % of the businessmen who participated in the study.

Clear deficiencies exist in training staff to deal with disabilities in both formal and informal education. Thus, 40 % of the teaching staff in the study admit to having great difficulties in adapting general programmes to the specific needs of students with disabilities. This situation is aggravated by two key aspects: one is teaching staff and student attitudes, which do not foster true social inclusion; the other

is the difficulties that exist in mediating and resolving conflict.

Generally, the training offer for people with disabilities is not directly related to the demands of the workforce. In most cases, training responds to the continuance of a determined offer that has existed for many years or the maintenance of existing collaborations between entities and enterprises and does not include a genuine interest in discovering and adapting to new professional profiles or future career paths. Although there has been a gradual increase in the number of school places, the nature of the proposals has not changed in the last seven years.

Informal training offers services that do not fulfil the principle of sectorisation, as in most cases they are located in out-of-the-way places or places that are difficult for their users to reach. This is accentuated by poor public transport infrastructures in the three Balearic Islands.

Job quotas for people with disabilities are not met by the public administration (20 % of the places seem not to have been covered) or private enterprise (only 40 % of enterprises offer long-term contracts to people with disabilities). Further, civil service exams do not include adaptations in content that meet candidates' needs.

Low expectations of people with disabilities among the business community, professionals and these people's own families have been detected; to a large extent, they become determinant in finding employment.

Insecure employment conditions, characterised by short-term contracts and seasonality, may lead to lost jobs. This situation causes a high degree of insecurity and distrust towards the business community and diminishes expectations of independence and autonomy. Only 40 % of people with disabilities who participated in the study had a long-term contract and only 4 % of these had any chance of being promoted.

In most cases, low wages result from the low level of qualifications and low-skilled jobs.

There is no culture (and services) that encourages the social and professional inclusion of people with disabilities into all spheres: housing, leisure, social and personal relationships, etc. This is evident from the analysis of questionnaires, interviews and group discussions.

If education is an inalienable right of children and young people with disabilities, having a job is a key element in the inclusion of adults with disabilities. Training is the basis for securing a job, which represents the beginning of promoting equal conditions for the inclusion of adults with disabilities into society. Thus, a priority

objective should be to foster the incorporation of adults with disabilities into the job market in the most normalised way possible, to encourage social inclusion and normalised lives.

The inclusion of people with disabilities into the workplace is still far from being a reality, despite the initiatives and efforts of recent years. People with disabilities are excluded from the job market and are inactive, as their main problem is not unemployment but inactivity. This locks the group into a vicious circle that tends to lead to marginalisation: low levels of training and, as a result, severe difficulties in finding employment and increased chances of being excluded from ordinary social circles. Further, even when employment can be found, it is generally at the lowest level, in terms of qualifications and wages, a fact that accentuates the marginalisation of this group.

The needs for improvement considered in this study will provide guidelines that lead to true improvement. Although many obviously positive experiences exist - people who have been smoothly integrated into an inclusive work environment - work still remains to be done to reach all the disabled individuals who need special support. The conclusions presented are a springboard for future research that may shed more light on this area.

Access to adult life requires dispensing with the false stereotypes that prevail in society and eliminating the hesitancy, doubts and lack of confidence characteristic of many of those around people with disabilities, of those who train or work by their sides, of the business community, even of the technicians and professionals who train them, of their families, of themselves and of the laws and norms that govern society.

In conclusion, Montobbio (1995, p. 60) points out that: 'No hope exists of a real identity for young people with disabilities if they are not assigned an active social role in the world of adults'. At present, most people with disabilities, with their virtues and defects, with their capacities and values, do not have opportunities to take part in active life. They should be given the opportunity to make mistakes, commit errors and, as a result, improve.

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# A comparative consideration of career paths into middle management in the construction industry

Prof. **Gerhard Syben**

Professor of work and industrial sociology at the Hochschule Bremen (Bremen University of Applied Sciences), Germany, research into activity profiles, competence requirements and vocational training, focusing on the construction industry

## Keywords

Comparative research,  
vocational training  
systems,  
further training,  
social effect,  
construction industry,  
supervisor

## SUMMARY

**The article is based on a comparative investigation of the training and further training paths into middle management on building sites in eleven countries in Europe. Using as its primary examples a comparison between Hungary, where vocational training takes place predominantly within the state education system, and Germany, where the dual system (short periods of further training and a predominantly experience-based vocational promotion path) dominates, the article shows that these different training paths also correspond to different forms of deployment and activities in workers' careers. Other countries included in the investigation confirm these findings. This suggests that in countries with a vocational training system like that in Germany, introducing changes – even if they were necessary in order to increase working efficiency – would entail a profound caesura in established social structures. In countries such as Hungary, in contrast, expanding the training paths could have a positive effect on skilled workers.**



## Introduction

In present-day comparative vocational training research, the focus is on the idiographic function, i.e. the view that vocational training systems can only be meaningfully compared if the way they are embedded in their respective social contexts is looked at (Cedefop; Tessaring, 1999, p. 242 [German version]; Lauterbach and Mitter, 1999, p. 247, footnote 8; Lauterbach, 2003, p. 107 et seq.; Georg, 2006, p. 187 and 189 et seq.). The intention of this article is to demonstrate, using the example of middle management on building sites in Europe, that the empirical analysis of activities and requirement profiles for which vocational training provides preparation, and the study of the social functions of vocational training within the scope of vocational training paths, can help us to understand better the ways in which vocational training systems differ.

To this end, a description will first be given of the subject matter of the example used here, i.e. the position and activities of middle management in construction and the different types of vocational training which provide preparation for working in middle management in construction in different countries in Europe.

The question of how and why such different vocational preparation makes it possible to carry out the same professional duties will then be discussed in detail on the basis of a comparison between Hungary and Germany. These two countries were chosen because they represent the diversity of the vocational training systems in Europe particularly well. To this end, the respective training paths into middle management in construction, empirical findings regarding requirements and activities on the building site and vocational training paths into middle management in construction will be considered. In order to enhance and supplement the arguments, information from a few other countries will also be drawn upon. In terms of theory, recourse will be had to the theory of the *effet sociétal*.

On this basis, an opportunity presents itself conclusively to consider some future prospects of vocational training in Europe. They arise from the questions of what the different systems can learn from one another, and to what extent, in order to improve vocational training and how they can best deal with adapting to the challenges of structural change in the construction sector.

## Middle management in building production

If we initially consider the organisation of a building site without taking account of the many differentiating details which characterise the reality of construction everywhere, three levels can usually be found in the leadership structure. The management level bears overall technical and economic responsibility and is in charge of practical and deadline planning, for work preparation and for central decisions on conditions and implementing production (production methods, use of technology, manning level and costs). The middle management level is responsible for implementing production decisions and planning, in particular for day-to-day assignments and for attaining performance goals and central production norms (quantity, quality, deadline) and for compliance with safety provisions. Direct assignment of the working groups (usually consisting of from four to six workers) is managed by lower management.

Middle management is thus located at the interface between carrying out the construction work and preparatory planning. Its particular significance is based on a specific characteristic of building production. Both as a result of the single-item production system which is predominant in the construction sector and for technological reasons, in construction work in the majority of cases planning specifications have to be interpreted by employees in order to be implemented in production (cf. Syben, 1999, particularly pp. 139-146). This interpretation is scarcely noticeable if activities which recur on many occasions are concerned. It may take on a greater scope if, although well-known activities are involved, they have to be carried out under unfamiliar practical, spatial or temporal conditions. However, it may also place demanding requirements on the professional competence of the employees if innovative solutions or technological or architectural solutions which are difficult to implement are involved; the same applies if – as is unfortunately not infrequently the case – the planning details have not been constructively well thought out or the building plans have been inadequately formulated.

In any event, workers on a building site can never simply execute mechanically prescribed movements. They must always have developed a technical understanding of the task and defined it for themselves before they can carry it out. It is middle management in construction which plans, guides and controls this process. It is therefore the current view in all European countries that this leadership task will become more and more important as more stringent requirements are placed on the productivity of companies.

In principle, this general description applies to building sites

throughout Europe. <sup>(1)</sup> Therefore, qualification for these positions also everywhere has the objective of technological professional competence at the middle level, as well as the capabilities to organise working processes practically and temporally and to guide and lead the workers carrying them out such that the planned structure is built with the desired quality, within the prescribed timeframe and with the costs envisaged. However, the manner in which this competence is imparted differs in the individual countries within Europe.

## Training for middle management in the construction industry in Europe

Training for positions in middle management in construction reflects the differences which are known from examination of the various vocational training systems in Europe. The essential difference is between systems which are primarily based on education and those which focus on training in businesses and (in the case of the construction industry) on building sites. A specific description follows here which is based on the example of the countries that were involved in the project, which primarily supplies the data on which this representation is based. <sup>(2)</sup>

In the central and southern European countries of the Czech Republic, Hungary, Poland and Romania, preparation for taking on middle management positions on building sites takes place by way of training/education in the intermediate vocational education system specialising in construction. <sup>(3)</sup> Admission to this training course

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<sup>(1)</sup> It is not possible to go into the consequences of the extremely heterogeneous size structure of businesses in the construction sector and of building sites in further detail here. A description for Germany can be found in Syben, 1999, and Syben et al., 2005.

<sup>(2)</sup> The findings on training and activities in middle management in the construction industry which are reviewed below form part of the results of the 'Eurosystem Bauweiterbildung' [Euro system further training for the construction industry] project which ran from autumn 2005 to autumn 2007 (cf. [www.eurosystem-bau.eu](http://www.eurosystem-bau.eu)). The countries involved were Denmark, Germany, Italy, the Netherlands, Austria, Poland, Romania, Sweden, the Czech Republic and Hungary, and also Switzerland at times. The objective was to develop joint modules for vocational training of middle management in the construction industry in Europe. In order to determine the fundamental principles, surveys were carried out in all the countries into the activities of middle management in construction and the training paths which lead to positions in middle management in construction. This investigative part has been completed since May 2006. The people responsible for it were Edith Gross and Gerhard Syben of the BAQ [Employment, Work & Qualification] Research Institute, Bremen.

<sup>(3)</sup> This form of vocational training is also to be found in other countries such as France and Finland, but they were not involved in this project.

generally requires successful attendance of upper secondary education. In the German-speaking countries (Austria, Germany, Switzerland), preparation for middle management positions in construction takes place by means of further training lasting from three to six months. <sup>(4)</sup> Persons admitted to this training course have usually already accumulated several years of practical experience on building sites and have completed their initial vocational training within the dual system of education and training; <sup>(5)</sup> their previous school education has usually finished at intermediate secondary level.

Denmark cannot be categorised into this scheme. There, formal further training for positions in middle management in construction exists only for so-called 'authorised branches of trade' for which workers must hold a particular accreditation (e.g. electrical installation). It is true that further training is available specifically for management positions on building sites, but attendance is not compulsory.

Sweden and the Netherlands occupy an intermediate position. In Sweden, there are two possible ways of preparing for middle management positions in construction; both of them take about two years to complete. In a similar manner to the system in the German-speaking countries, it is possible to complete further training on the basis of 'personal planning' in parallel with one's professional activities; this builds on initial vocational training and consists of one third theoretical work to two thirds practical work. For some time it has also been possible, as in the countries with an educational system of vocational training, to complete so-called 'qualified vocational training', which consists of around three quarters theoretical training to one quarter practical training. Both paths require the worker to have attended upper secondary education, into which it is possible to integrate vocationally oriented subject matter and subject matter providing a vocational qualification. In the Netherlands, in order to take on a middle management position in construction the worker must have successfully passed stages 3 and 4 of the educational system. For each of these stages, an educational apprenticeship path and an apprenticeship path within businesses exist in parallel. On the educational apprenticeship path, transfer to stage 3 requires the

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<sup>(4)</sup> This type of training must also be stated to include the Italian partner from the Bolzano region; this region has adopted the German system of vocational training in its entirety, but is of course not representative of Italy in this respect.

<sup>(5)</sup> The relevant peculiarity of the dual system of education and training is the high proportion of training within the business and under the responsibility of the business, as well as the significance accorded to building experience by participating in the company's working processes.

worker to have attended upper secondary education. This is equivalent to the course of education in the countries with an educationally based vocational training system. On the apprenticeship path within businesses, the worker enters stage 2 after completing intermediate secondary education. From there, it is possible to transfer to the higher stages step by step. Since training on the apprenticeship path within businesses takes place predominantly in the business, this form of vocational training resembles the system of apprenticeships within businesses in the German-speaking countries.

## The function of idiography when comparing systems of vocational training

In a synthesis report published as long ago as 1999 on the status, at that time, of vocational training research in Europe, Cedefop pointed out that in order to compare vocational training systems it is necessary to have a broad prior understanding of the different historical and sociological contexts of different cultures and that context-related conditions such as the labour market, social legislation and the economic structure must also be included (Cedefop; Tessaring, 1999, p. 238 [German version]). Consequently, vocational training systems must be considered to be social organisations which are embedded in a national, i.e. social and cultural, context (Lauterbach, 2003, p. 143). With respect to comparative vocational training research, it follows that differences between the vocational training systems cannot be explained by comparing individual elements of these systems, but instead only by demonstrating the peculiarities of the respective societies in which they are embedded and their relationships within the scope of their respective social context (Georg, 2005, p. 188).

Thus, to be able to understand why the vocational training for positions which are identical in form in two countries is organised very differently, it is necessary to analyse, for each country, the relationships between the system of vocational training and the system of occupations, business labour organisations and social remuneration hierarchies and similar factors. As the attempt succeeds in reconstructing the social constellations and respective historical and socio-cultural context in which a system of vocational training is to be found, it also becomes clear why it best fulfils the function of reproducing the work capacity for this context in this way and not differently: *‘Gegenstand des Vergleichs sind also nicht die einzelnen Phänomene der Berufsbildung selbst, sondern deren Zusammen-*

*hang mit Phänomenen anderer gesellschaftlicher Bereiche* [The subject of the comparison is thus not the individual phenomena of vocational training itself, but rather their connection to phenomena in other social areas] (Georg, 2005, p. 188).

Bringing out these characteristics of a system of vocational training and demonstrating the links to other social partial systems and the overall social context is the particular achievement of the idiographic approach in a transnational comparison of vocational training systems. It is only by demonstrating the function of the vocational training system in its social context of reproduction of work capacity that its 'meaning' and its specific structural features in each case are explained (Georg, 2005, p. 189).

However, given the temporal and financial conditions of the project in which the findings which are described in this article were developed, a comprehensive idiographic work-up of the social context of the vocational training systems considered was not possible. Therefore, only two social context variables are considered here: the operational activities of middle management in the construction industry and the vocational paths leading into positions in middle management in construction. It is demonstrated, however, that these two variables must be given their due weight in the attempt to understand different forms of vocational training systems.

## Data acquisition and survey methods

### **Analysis of occupational activities**

The analysis of occupational activities is generally regarded as an important precondition for the determination of requirements for the vocational qualification and vocational training of employees <sup>(6)</sup> (cf. Pätzold et al., 2007; Clement et al., 2006; Bullinger, 2006; Cedefop; Schmidt et al., 2005; Mulder et al., 2005; Rauner, 2004; Bullinger et al., 2003; Hasler et al., 2002; Hilbert et al., 2002; Schömann, 2001, Cedefop; Sellin, 2001, Dostal and Kupka, 2001; Syben, 1996; Breunig, 1993; Gastrock, 1984; Hartung et al., 1981; Teichler, 1979; Grünewald, 1979; Weißbach, 1975; Joint authors, 1974). The empirical survey of vocational activities in the countries included here was based on extensive preliminary work from a project, carried out in Germany, to remodel occupations in middle manage-

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<sup>(6)</sup> In Germany, the term '*Berufs- und Qualifikationsforschung*' ['occupational and qualification research'] is usually used for these training-related works. 'Activity analysis' ('*Tätigkeitsanalyse*') tends to be mentioned when the preparation of work structuring and wage calculation is concerned. However, this is not formal usage and the boundaries are blurred.

ment in construction (cf. Syben et al., 2005). The approach taken there (cf. *ibid.*, particularly pp. 127-139 and 227-247) was based on the long-established view in qualification research that required qualifications cannot be simply derived from empirically determined activities (cf. Ekardt, 1979; Offe, 1975). Therefore, while the results of the empirical analysis of activities constituted an important point of reference in order to determine qualifications, in the process of defining the contents and forms of the proposed further training model they were supplemented by findings from occupational/pedagogical theory development and normative settings in training policy.

In accordance with the status of qualification research, qualitative methods were used (outline interviews with open questions) and questions were asked of different people (position holders, their superiors, human resources managers, training managers, company managers, experts serving a number of companies). This made it possible to balance out distortions which could have arisen as a result of one-sided perceptions of respondents. The companies included in the survey were chosen such that the most important structural parameters in the sector (branch of trade and company size) and thus the essential factors which influence the specific manifestation of the activity of the group of people investigated were controlled. At the end, material-rich, subtly differentiated and empirically assured descriptions of the occupational activities of middle managers in construction were available. They include the dimensions of 'mastery and use of construction techniques', 'organisation of the construction process' and 'personnel management' and take account of current technological, organisational and social developments in the construction sector and the construction business (cf. Syben et al., 2005, pp. 139 to 225). These results were examined with respect to their generalisability in discussions with experts serving a number of firms. Their generalisability is also proved by the fact that they currently constitute the basis for the official process for reforming further training to become middle managers in construction in Germany.

These descriptions were used in the international comparative project, in which there was no scope for independent method development, in order to construct the investigative instrument. A survey form containing predominantly closed questions was prepared on which it was possible to record activities in middle management in the construction industry at a moderate level of complexity (examples: 'calculate quantities of concrete required', 'be aware of environmental protection regulations and ensure compliance', 'carry out sequence planning'). A detailed grid of categories which had already been checked was thus available. This grid made it possible

to determine, in a largely standardised version, completely and at the same time in a finely delimited manner with respect to the activities of other employees on building sites, which activities an employee at middle management level in construction carries out in a country, and which he does not. Moreover, as a result of a few open questions it was possible to supplement the answers, although this possibility was scarcely used.

The surveys regarding the activities were carried out in all the countries as interviews of operational experts (supervisors, human resources managers) and of employees who occupy positions in middle management in the construction industry. In order to ensure that the results could be compared, in all the countries the companies selected for the surveys operate in the structural engineering sector and have building sites at which usually at least 20 and not significantly more than 100 workers have to be supervised. As a result of the narrow timeframe and particularly the narrow financial scope, it was only possible to carry out the surveys in two companies in each country, and in some cases even only in one company; they thus possessed the character of individual case studies (cf. Süßmann, 2007; Borchardt and Göthlich, 2006; Goode and Hatt, 1956). Thus, the survey is naturally not representative in the statistical sense. However, the cases were chosen in such a way that they corresponded to a typical construction company in the category described. Methodologically, they thus represent all the important features of the universal set of construction companies of the aforementioned type in the respective country. In other words, in principle, activities in middle management in the construction industry in this type of company have the appearance and form determined in this survey.

In some countries (Denmark, Italy, Austria, Sweden, Switzerland), the surveys were carried out by experts from the relevant project partners; in the other countries (the Netherlands, Poland, Romania, the Czech Republic, Hungary) they were carried out by the investigation managers in conjunction with the relevant experts. For Germany, recourse was had to the substantial findings from the aforementioned project which had already been completed. All the questionnaires were evaluated by the investigation managers; the results were presented, discussed and jointly interpreted at a meeting with the experts from all the countries involved. In view of the small number of cases, this check of the results by the experts to determine their validity, reliability and generalisability is to be accorded very great importance. However, since they were without exception declared experts with a well-founded and broad knowledge of the activities carried out on building sites in the respective countries, it is ensured



that the relevant results are generally valid for activities in middle management in the construction industry in the individual countries. <sup>(7)</sup> Methodologically, moreover, this combines the benefits of a survey method in which all countries have been investigated by people from a single country, i.e. from the same sociocultural point of view, with the method in which each country is investigated by an autochthonous person, i.e. from a specific point of view in each case (cf. Niebuhr, 1991, p. 212).

The results for each country were summarised in a separate verbal description of the typical activity pattern in middle management in the construction industry. These country-specific descriptions formed the basis for comparison of the fields of responsibility and activities in middle management in construction.

### **Analysis of occupational career paths**

The surveys on the training paths and usual occupational careers followed by employees to be able to carry out functions in middle management in the construction industry were executed in several waves. Firstly, using a standardised questionnaire, basic information regarding training for middle management in construction was collected in all the countries involved in the project. On the basis of this and of supplementary general material about the vocational training systems in the countries involved, <sup>(8)</sup> a schematic description of the occupational training and career path into middle management that is specific to the construction industry was produced for each country. Additionally, in conjunction with the experts from the countries concerned, an attempt was made to make the existing training scope comparable by calculating volumes of hours for individual training paths. The schemes were checked jointly with the experts from the individual countries (particularly when for linguistic reasons it was impossible for the investigation managers to evaluate existing information on their own) and corrected where necessary.

Finally, all the information was summarised for each country in a specific verbal description of the typical training and career path into middle management in the construction industry. These country-specific descriptions formed the basis for comparison of the different training and career paths.

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<sup>(7)</sup> From a methodological standpoint, of course, the results in any case, like scientific results generally, have the character of a hypothesis which must be proved by further investigations. However, this would also hold true in the case of a broader empirical basis.

<sup>(8)</sup> Descriptions of the systems of general and vocational training: [www.eurydice.org/page/portal/eurydice](http://www.eurydice.org/page/portal/eurydice); thematic overviews and analyses: [www.trainingvillage.gr/etv/information\\_resources/national/vet](http://www.trainingvillage.gr/etv/information_resources/national/vet)

## Training for middle management in the construction industry in Hungary and Germany

Hungary and Germany were selected for closer consideration. In Hungary, vocational training is the responsibility of the public education system; in Germany, it is to a large extent the responsibility of the business sector. The differences are therefore particularly pronounced, and so this comparison corresponds to the methodical procedure of the 'most-different-system designs' (Georg, 2005, p. 188). Recourse will be had to information from other countries for supplementary purposes on individual points.

### **Training for middle managers in the construction industry in Hungary**

In Hungary, training for positions in middle management in construction takes place in the intermediate education sector specialising in construction. The usual path to this training is via a specialised intermediate school. Education at this school follows that at an eight-year primary school and lasts for four years. Education at the specialised intermediate school thus ends, after twelve years at school, with the school leaving examination, and thus corresponds to the level of upper secondary education.

The first two years of training (school years 9 and 10) at the specialised intermediate school have a general curriculum. In the third and fourth years (school years 11 and 12), specialist subjects are offered along with an introduction to the chosen occupational area. Overall, more than seven tenths of the entire four years of education and training time is of a general nature, somewhat more than one tenth consists of introductory vocational subject matter, and a further tenth of work placements in companies. At specialised intermediate schools geared towards the construction industry, pupils sit the school leaving examination in three theoretical construction subjects (structural engineering and building organisation including business management subject matter as well as information technology and AutoCAD) and one practical construction subject.

Education at a specialised intermediate school can be followed by training to become a technician. This lasts for two years, i.e. constitutes school years 13 and 14. This form of training for positions in middle management in Hungary provides a paradigm for the countries in Europe in which vocational training takes place within the state education system. While a student who has taken the school leaving

examination at a grammar school in Hungary is also entitled to train to become a technician, this choice is made only infrequently.

Training to become a technician comprises approximately 1 800 hours of instruction plus around 750 hours of practical training in the training workshop and a work placement in a firm, i.e. a total of 2 550 hours. The training focuses on theoretical instruction in technical construction subjects (surveying, technical drawing, strength of materials, technology, construction machinery, building materials and other subjects) and the organisation of building sites; together, these aspects make up almost 40 % of the overall training time. A further 6 % is allotted to training in electronic data processing applications. Practical training components make up almost 30 % of the overall training time and predominantly take place in the college's own training workshops, but also include a work placement lasting around four weeks (160 hours) at a building firm. Just under 20 % of the training components have general contents, including foreign languages and sport.

In principle, young people who have completed the training to become a technician in the construction sector have two different possible vocational paths. They can gain employment as technicians in an office (at a construction firm or planning office) and work there predominantly as draughtsmen and design engineers, or they can aspire to the position of *művezető* in construction firms; this position is entirely in accordance with the activity of middle management in construction which was described in the introduction.

Even if qualified technicians aspire to work on building sites, they usually begin their professional lives working for a construction company as technicians in the office. As a result of the technical orientation of their training, they can find their bearings most quickly in this activity. In this phase, they are primarily involved in preparing the building site and performing follow-up work on the building site (e.g. work preparation, invoice verification, ordering materials, calculating wages). In this way, they first become familiar with the building site analytically. Initially, this work takes up about 70 % of their working hours and is largely carried out using a PC. In their remaining hours, they acquire practical experience by being assigned to work as 'apprentices' for the position of *művezető* on the building site. They work alongside an experienced *művezető* on the site, receiving on-the-job training in order to become familiar with the practical side of the operations on the building site of which they were already aware in terms of symbolic illustration and analytical permeation from their office work. Over the course of time, the relationship between the office and building site gradually shifts in favour of a larger

proportion of work on the building site. After approximately two to three years of vocational experience, a technician of this type can work as an independent *művezető*.

Most technicians regard the changeover to work as a *művezető* on the building site as a promotion. However, it is also possible for a technician to remain in the office in a technician's position. From the company's point of view, it is easier to recruit technicians for office work than it is to recruit *művezető* for the building site.

### **Further training to become a middle manager in the construction industry in Germany**

In Germany, the path into middle management in the construction industry always involves proving one's worth on a building site. Future middle managers are trained skilled workers who first attracted attention in their execution of construction work as a result of their competence and commitment, and who then take on small leadership tasks in positions at lower management level and later also at middle management level. Their scope and difficulty are increased step by step and dealing with them serves simultaneously to verify whether they are suitable for management activities.

This form of qualification is supported by training courses which are either attended in parallel with work or for which occupational activities (but rarely the employment relationship) are interrupted. Since these training courses run entirely separately from vocational training to become a skilled worker, they belong to the field of further training [*Weiterbildung*].<sup>(9)</sup>

There are different training courses according to the different levels of the building site hierarchy. Here, only further training to become a *Polier* [site foreman] will be considered, i.e. the position on a building site which entirely corresponds to the description given in the introduction and which is comparable to the position of *művezető* in Hungary. Training courses which prepare workers for the examination to become a *Polier* are usually offered by training centres which are usually supported by building industry associations. Candidates sit the examination before a *Handwerkskammer* [chamber of crafts] or an *Industrie- und Handelskammer* [chamber of trade and

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<sup>(9)</sup> In German, there is a linguistic distinction between *Fortbildung* and *Weiterbildung* (both of which mean 'further training'). *Fortbildung* refers to training courses which are geared towards promotion within the hierarchy of occupational positions. *Weiterbildung* refers to all training courses which serve to adapt or expand competence but do not result in promotion. The training courses for promotion into middle management in the construction industry therefore constitute '*Fortbildung*'. However, other countries do not have a term which equates to this linguistic usage, and so this article uses only the term '*Weiterbildung*' which is in common use in Europe.

industry]; the examination is governed by state regulations. <sup>(10)</sup>

Authorisation to sit the examination requires candidates to have passed the skilled worker's examination in a construction occupation and to have at least two years' vocational experience in a building firm. Applicants who have not passed a skilled worker's examination may also be admitted to the examination, but must have at least six years of vocational experience in a construction firm. This too demonstrates the high level of significance of professional experience for promotion to become a *Polier*. Nowadays, however, participants in training courses which prepare for the examination to become a *Polier* usually have to have been trained to become a skilled worker as well as possessing occupational experience.

The training courses providing preparation for the examination to become a *Polier* usually have a scope of 640 hours. Of these, 140 hours are allotted to acquisition of the capability to train on the building site within the scope of the German system of training skilled workers within companies. The remaining 500 hours consist exclusively of theoretical training aspects and correspond to around 14 or 15 weeks of full-time instruction. Approximately 50 % of this is allotted to specialised construction subject matter, one third to organisation and planning and around 15 % to human resources management.

Young people who complete this training course are often assigned to work alongside an experienced *Polier* for a time before they are able to take on a position in middle management in construction on their own responsibility. However, in small companies it can also be the case that a worker has exercised the function of *Polier* for several years before completing the *Polier* training course.

### **Comparison of vocational training for middle management positions in construction in Hungary and Germany**

First of all, some central elements of vocational training for middle management positions in the construction industry in Hungary and in Germany will be contrasted. Such a pure comparison without considering the different social contexts is referred to in comparative vocational training research as a juxtaposition and is considered to be a preliminary stage of an idiographic comparison (Cedefop; Tessaring, 1999, p. 241 [German version]; Lauterbach, 2003, p. 183 et seq.). At this juncture, it appears meaningful to select the elements 'educational basis', 'construction theory training' and 'acquisition of occupational experience' for such a juxtaposition.

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<sup>(10)</sup> On the basis of these regulations, someone who has passed the examination may call himself '*Geprüfter Polier*' [certified site foreman].

- In formal terms, in Hungary the educational basis comprises twelve school years, i.e. it ends on completion of upper secondary education. In Germany, it usually includes nine or ten years, which corresponds to completion of intermediate secondary education. However, this comparison by itself is not complete if no consideration is given to the fact that in Hungary school years 11 and 12 at the specialised intermediate school already contain a strong element of vocational education. In Germany, on the other hand, school attendance for nine or ten years up to the end of intermediate secondary education is followed by an apprenticeship which lasts three years and, as well as practical training components within a company and a training centre, also provides for around 25 % of the training time at vocational college to be spent on theoretical and practical subject matter (Syben, 2000, p. 23).
- Accordingly, construction theory training begins in Hungary in the 11th school year, and in Germany in the first year of the apprenticeship within a company, specifically in the accompanying instruction at vocational college. By the time a worker has finished vocational training for a position in middle management in the construction industry in Hungary, he has completed around 1 800 hours of construction theory training; in Germany, the figure is around 1 400 hours. In order to be able to assess these figures correctly, however, consideration must be given to the fact that in Hungary just under three quarters of this construction theory training takes place at a level above upper secondary level, while in Germany two thirds is completed within upper secondary education.
- It is not possible to compare the candidates' occupational experience for a position in middle management in the construction industry in mathematical terms, because in both countries it may differ a great deal in individual cases. Generally, however, it ought to last considerably longer in Germany than in Hungary, even if only the time completed following the specialised intermediate school (in Hungary) and following the apprenticeship within a company (in Germany) is taken into account. Here, too, in order to make a complete assessment, consideration must be given to the fact that this extension of operational experience takes place in Hungary on the basis of completed formal education and the professional status achieved in middle management, while in Germany it is usually the prerequisite for promotion to middle management level.

Thus, it can be seen that, while juxtaposition as a pure comparison of data and information from different social contexts can provide an impression of the different nature of vocational training for positions in middle management in the construction industry in two countries, it cannot actually describe this different nature and is even less capable of explaining it. Therefore, it is agreed within comparative vocational education and training research that to do this an analysis of variables in the vocational and social context and their connection to the elements of vocational training which have been considered is required.

## Activities in middle management in the construction industry in Hungary and Germany

### **Activities in middle management in the construction industry in Hungary**

To be able to describe the activities of middle managers in the construction industry in Hungary and Germany in a comparative manner, classification into the fields of responsibility of preparatory planning, organisation of the execution of the work and monitoring and documentation of the execution has been undertaken. This classification was developed within the scope of the research in Germany which has already been mentioned (Syben et al., 2005, p. 139 et seq.) and makes possible consideration of the matter in a simultaneously detailed and structuring manner.

#### *Preparation and planning of the building site*

The *művezető* carries out practical planning and time planning for his assembly section; when drawing up construction schedules and operation charts he takes over specifications which the site manager has drawn up for the entire structure. He is responsible for work preparation, drawing up formwork plans, deciding on the selection of the construction equipment used, including the formwork material, and on the number of workers required and their qualifications as well as for the execution and monitoring of the building site facilities.

The elementary survey of the building site is carried out by surveyors, and the subsequent surveying work (e.g. setting up alignments, measurement of axes, checking elevations) is completed by the *művezető*. Surveying duties during the working process which serve to check the quality of the components produced (perpen-

dicularity, horizontalness, levelling) is undertaken by the construction foreman. The *művezető* checks the results. The quantity survey (11) is a task undertaken by the *művezető*.

#### *Organisation of the execution of the work*

In the execution of the work, the *művezető* is primarily allocated tasks associated with arrangement of material, equipment and personnel and the practical organisation and organisation in terms of time of the working process and worker assignment. This includes drawing up daily plans, assigning and overseeing work by subcontractors, reorganising work if unforeseen events occur and ensuring a smooth transition to the following assembly sections. For the execution of work in his assembly section, the *művezető* bears overall responsibility for the assignment and performance of the workforce. In particular, his duties include dividing up workers for the individual work tasks, helping to solve problems in special cases, recognising and remedying defects in the execution of the work and motivating the workers. It is specifically expected that the *művezető* will evaluate his colleagues and train young apprentices for the position of *művezető*.

However, direct leadership, direction and supervision of the workers, as well as direct implementation of the technical construction processes, are the responsibility of the construction foreman, i.e. the management level below the *művezető*.

#### *Monitoring and documentation*

The *művezető* checks the quality of the material delivered to the building site. He monitors compliance with deadlines and the quality of the work carried out; the construction foreman supports him in this work. He maintains the construction log, the concreting log, the workers' timesheets and the material lists.

Furthermore, the *művezető* is responsible for the circumstances which should result in optimisation of the costs (compliance with deadlines, duration of use of equipment, optimisation of material consumption, avoidance of idle times). However, specific consideration of the building site's costs is the responsibility of the construction supervisor, not of the *művezető*.

Additionally, the *művezető* must ensure compliance with the provisions on safety at work, accident prevention and environmental protection.

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(11) The term 'quantity survey' refers to the survey of the finished structure. It forms the basis for acceptance and invoicing.



## Activities in middle management in the construction industry in Germany

### *Preparation and planning of the building site*

Preparation of the building site in terms of planning is the task of the work preparation department (office) and/or of the site manager. This primarily concerns practical planning and time planning for the building site and building site facilities as well as work preparation. The same thing applies to decisions on the technology used (machinery, equipment, formwork system) and the building materials used (if these have not been specified by the customer). Subcontractors are chosen and engaged by the site manager or purchasing department. The decision regarding the number and qualifications of the workers to be assigned can be made by the site manager or the *Polier*.

The *Polier* becomes involved in this work as the planning progresses; he is expected to check the feasibility of the planning. It is the *Polier's* task to set up the building site facilities.

The basic surveying work is carried out by the surveying office. Additional surveying work is carried out by the *Polier* on the basis of the figures determined by the surveyors. Surveying work during the working process that serves to check the quality of the components produced is carried out by the *Polier* himself or by the construction foreman under his responsibility. In principle, the site manager carries out the quantity survey; the *Polier* only takes on this duty in exceptional cases.

### *Organisation of the execution of the work*

In the execution of the work, the *Polier* is responsible for implementing the planned logistics, i.e. he is primarily responsible for the disposal of material, equipment and personnel and for the practical organisation and time organisation of the working process and the assignment of the workforce. This involves dividing up the workers and providing them with instructions, drawing up daily plans, reorganising work if unforeseen events occur and coordinating the assembly sections. The *Polier* is additionally responsible for the direct application of the technical construction procedures and for monitoring the execution of the work. The *Polier* also allocates work to the subcontractors and examines the results.

The *Polier* bears overall responsibility for the assignment and output of the workers, but the construction foremen provide direct guidance (direction and supervision). In particular, it is the *Polier's* duty to undertake daily work planning and divide up the workers for the individual

work tasks, to help to solve problems in special cases, to monitor the execution of the work, to recognise and remedy defects in the execution of the work and to motivate the workers. Providing support for colleagues and recognising their potential (as the new generation of *Poliere*) are in principle regarded as the tasks of the *Polier*; he is also responsible for training up-and-coming managers (construction foremen and the new generation of *Poliere*). In any event, the *Polier* is responsible for the training of young workers which takes place on the building site within the framework of the dual system.

#### *Monitoring and documentation*

The *Polier* checks the quality of the material delivered to the building site. He monitors compliance with deadlines and the quality of the work carried out. He is responsible for compliance with the provisions relating to heat protection, moisture protection, noise protection and fire protection. The *Polier* maintains the construction log, the concreting log, the workers' timesheets and the material lists.

The *Polier* bears joint responsibility for ensuring that the building site costs are minimised and that the construction schedule is observed. To this end, he must see to it that materials are used economically, that the time during which equipment remains on site is minimised, and that idle times in the workflow are avoided.

It is the responsibility of the *Polier* to ensure compliance with the provisions on safety at work, accident prevention and environmental protection.

### **A comparison of activities in middle management in the construction industry**

A comparative consideration reveals that to a large extent the *művezető* in Hungary and *Polier* in Germany carry out the same activities. The differences appear to be relatively small. However, if, in accordance with the requirement of the idiographic method, a relationship is constructed between the form of the activity and the form of the vocational training for each country, characteristic differences with wide-ranging consequences are revealed.

The activities of the *művezető* in Hungary and *Polier* in Germany are obviously similar, particularly with respect to setting up the building site facilities, organising the execution of the work and in the practical and temporal disposal of resources for the construction process. Additionally, both of them are likewise responsible for the quality of the execution of the work, for compliance with the deadlines and cost limits and for documentation of the operations on the building site.

In contrast, there are differences in the nature of involvement in preparatory planning for a construction project. In Germany, the *Polier* takes over the completed planning and preparatory work from the site manager or the work preparation office. In Hungary, the *művezető* receives framework specifications from the site manager, who is responsible for all the construction work, within which he independently undertakes practical and temporal planning for part of the structure. Planning duties of this type are not carried out by a *Polier* in Germany. While the *Polier* undertakes practical and temporal preparations for the execution of the work for the next 14 days within the framework of the predetermined plans, the primary expectation of him is that he will check the planning undertaken by the engineers in the office with respect to its feasibility on the building site and will implement it in practice.

This subtle differentiation in activities is entirely in accordance with the difference in the form of training provided in the two countries. In Hungary, the *művezető*'s training is primarily geared towards the acquisition of formal knowledge and analytical capabilities which enable him to carry out practical and temporal planning activities and preparatory work. While the *Polier* in Germany also learns these skills to a certain extent, his competence is focused on the application of know-how acquired during his work history. This interpretation is supported by two further findings. The *művezető* makes the decision regarding the construction equipment to be used and the material to be employed for the formwork, and he undertakes the quantity survey. A *Polier* never undertakes these activities, or only exceptionally. They belong to the area of operations of the site manager, who is usually a civil engineer.

The same result is reached if the division of work on building sites in the Czech Republic is considered. There, too, in a similar manner to the training of the *művezető* in Hungary, the training of the *mistr*, the position which corresponds to the position in middle management in the construction industry which is defined here, is set up on a technical basis and geared towards the acquisition of formal knowledge and analytical capabilities (it is of course supplemented by practical experience in that case too). The division of work on the building site reveals the same pattern as in Hungary: on Czech building sites, the *mistr* carries out planning duties and work preparation duties to a considerably greater extent than the *Polier* in Germany. In one of the companies investigated, which was in exclusively Czech ownership and had Czech management, this form of work division was even more pronounced than in another whose management style revealed traces of a German influence because

it was a subsidiary of a German construction group.

In this connection, it is particularly interesting to analyse the division of work on building sites in the Netherlands and the activities of the *uitvoerders*, the corresponding position in middle management in the construction industry, since there is obviously no uniform 'Dutch model', but instead the work carried out by an *uitvoerder* depends on his training background. While an *uitvoerder* who completed his training on the educational training path or at a college of higher education is much more likely to be assigned difficult technical planning tasks, *uitvoerders* who trained within companies tend to focus on direction and supervision of the execution of the work on the building site.

The form of the division of work in the countries considered comparatively here thus corresponds to the type of vocational training. The *művezető* (like the *mistr* and an *uitvoerder* who trained on the educational training path) has completed training to be a technician which is much more akin in type to the training of an engineer than to that of a worker. In order to carry out middle management activities on the building site, he needs supplementary practical experience which is acquired in the appropriate phases of his occupational career. However, his activities also include planning work for which he is trained and which is in accordance with his occupational role and his occupational self-image. In contrast, the *Polier* in Germany (as in Austria and as in the case of an *uitvoerder* who trained within a company) acquires his professional competence chiefly as a result of practical experience; formal knowledge and analytical skills are imparted to a much smaller extent. Consequently, he is also less concerned with planning activities; instead, he is primarily expected to organise the execution of work on the building site – again, this is in accordance with his occupational experience and his occupational self-image.

In relation to these differences, which can be determined, as it were, with regard to the division of work in the construction process, there are, however, complementary differences: while the *Polier* in Germany is actually the direct superior of the workers as the supervisor on the building site, the *művezető* in Hungary generally does not manage the workers directly but instead issues instructions to the construction foremen who transform his requirements into instructions to the workers. This is a result also of the form of the training and its integration into social circumstances. The *Polier* in Germany and the construction foreman in Hungary (as well as an *uitvoerder* who trained within a company in the Netherlands) have moved into the management position from a working-class position.

In contrast, the *művezető*, the *mistr* and an *uitvoerder* who trained on the educational training path have passed through a form of vocational training which has also, as it were, moved them past the working class into a middle management position.

## Occupational career paths into middle management in the construction industry in Hungary and Germany

This specific character of vocational training and occupational activity naturally recalls the theory of the *effet sociétal* which was developed in the 1970s by Burkart Lutz, Marc Maurice and others (Lutz, 1979; Maurice et. al., 1982; cf. also Maurice, 2000). In a comparative study in companies with identical or very similar production technologies and products, they found very different forms of activities, manning levels and operational hierarchies; they were able to explain these differences on the basis of complex interdependence between work organisation and vocational training. If we consider the relationship between the form of vocational training and occupational career patterns, we will find a similar effect of the social context.

The *művezető* in Hungary has completed a specialised intermediate school, reached the level of upper secondary education and then completed training to become a technician. He or she has also simultaneously made the decision not to attend vocational college, where the three-year period of training to become a skilled worker takes place, after the specialised intermediate school. It is his/her qualifications, but also his status as someone who has completed training to become a technician, which provide him/her with access to positions in middle management in the construction industry. Taking on a position on a building site naturally requires the formal/analytical competence acquired during training to be supplemented by practical experience. However, he or she acquires this practical experience on the basis of his or her status as a technician. It is the form of the training which gives him this occupational and social status and which opens up these vocational opportunities.

In Germany, the position of a *Polier* represents occupational advancement. Following intermediate secondary education, a *Polier* have first of all completed training to become a skilled worker. They have worked in this occupation and have been recommended for a middle management position and function primarily as a result of their practical ability. Formal knowledge and analytical capabilities

are hardly considered unimportant for this position, but are clearly viewed as subordinate to competence based on occupational experience. Here, too, formal knowledge is not acquired on a continuous training path, but rather by means of further training which is undertaken several years after completion of the training to become a skilled worker, and is significantly smaller in scope.

Participation in further training to become a *Polier* presupposes that the worker wishes to advance into middle management in the construction industry. It is also only meaningful if the worker has this occupational goal, since it does not open up any other career options. In contrast, completing technicians' college in Hungary initially opens up different career options; *művezető* is only one of these, and not the last option.

Technicians in Hungary can make use of their training, their type of knowledge and competence and their occupational understanding of their role to transfer to university education, and do so not infrequently. Moreover, young graduates of colleges of higher education begin their careers working in the position of *művezető*. They thus at the same time have the opportunity to rise to the position of site manager at a later point in time. In addition, workers who have completed the training to become a technician in Hungary also have the opportunity to become technical inspectors. To do so, once they have accumulated ten years of occupational experience, they can complete further training at a university which covers the financial, legal and technical aspects of construction and of quality control and ends with an examination.

No comparable further training is offered to *Poliere* in Germany, and nor would it be tailored to their previous competence profile. Moreover, in Germany *Poliere* only complete qualifications to become civil engineers in exceptional cases. While it is true that in small and medium-sized enterprises a *Polier* may deal with site management tasks, this happens precisely because of his occupational know-how and his practical occupational competence as a *Polier*, not because the competence and knowledge are similar to those of a civil engineer. *Poliere* only exceptionally succeed in entering university.

In Germany, the training, form of knowledge and competence and occupational self-image mean that the *Polier* is singled out as a worker who is a member of middle management in the construction industry and who, although he/she is familiar with the engineers' world, is separated from it by a clear dividing line. Conversely, someone who has completed the training to become a construction technician or civil engineer also does not take on the position and role of a *Polier*. Even a student who, for some reason, fails to finish his engineering

degree course (if he/she does not turn his back on the construction sector in disappointment) as a rule becomes a construction technician, not a *Polier*. The superficial argument for this fact is that the formal/analytical qualification possessed by a technician or engineer does not, by its nature, make him/her capable of carrying out the duties of a *Polier* on a building site. However, at least as much significance should be attached to the fact that the position of *Polier* is the promotion which lies at the end of a skilled worker's career. Consequently, the position of *Polier* is a position located in the social context of blue-collar professions. <sup>(12)</sup>

Conversely, this means that the position of *Polier* is an attainable occupational and social option for those who have completed training to become a skilled worker. It is true that a young skilled worker likewise has the option of changing over to train as a civil engineer, but this is an alternative move, not a sequential move. He would have to make the decision before starting out on the path to becoming a *Polier*, or he would have to revise the decisions which led him onto the path to becoming a *Polier*. For skilled construction workers, the path leads towards becoming a *Polier* and ends there.

On the other hand, a worker who completes skilled worker's training in Hungary has as good as no chance of being promoted into the position of *művezető*. While he/she fulfils the formal requirements for transferring to technician's training, this happens as rarely as a German *Polier* making the transition to university. The reason given by companies is that the worker lacks the competence to supervise other employees and to undertake the administrative work, i.e. precisely the formal and social requirements which form the basis for the occupational status of the technician in middle management in the construction industry. If a skilled worker in Hungary really wishes to obtain occupational promotion, he or she likewise faces a difficult choice, because this career sequence does not exist. He/she must leave his job as a worker and train to become a technician. He/she would thus have to (be able to) revise the decision he made when choosing the training course which had made him a skilled worker. Passing directly from being a skilled worker to being a *művezető* is just as unlikely as passing directly from being a *Polier* to being an engineer.

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<sup>(12)</sup> Even though, in accordance with social insurance law and the collective wage agreement, the *Polier* is considered to be a white-collar worker.

## Prospects

Burkart Lutz pointed out the danger that merely identifying the consequences of the *effet sociétal* means that only the impossibility of comparing education systems and social contexts can be established (Lutz, 1991, p. 104 et seq.). This would make mutual learning difficult. In fact, taking the social context into account primarily and initially identifies what is impossible or in any event not readily possible.

It thus becomes clear that changes to the form of preparation for taking on positions in middle management in the construction industry in Germany – and likewise in other countries with a dual system of vocational training – could have serious consequences for the employees, the company and the sector. It is indisputable that the system used so far to provide vocational training for middle managers in the construction industry in Germany is in need of improvement (Syben et al., 2005, p. 12 et seq.). But the more closely vocational training were approximated to the type geared towards formal/analytical qualifications, the more the path to becoming a *Polier* would diverge from the current experienced-based route to promotion for qualified and motivated skilled workers. It is expected that this would have negative consequences for the attractiveness of the skilled worker occupations, career choices made by young people and the motivation to achieve among young skilled workers. They would be deprived of a route to social advancement on the path to proving their worth in their occupation. Certainly this would have consequences in terms of interest in the occupation and in terms of the ability of companies to attract efficient and motivated young people into blue-collar occupations in the construction sector.

However, if modernisation of vocational training for middle managers in the construction industry in Germany results in reinforcement of the formal/analytical type of competence, new possible ways of making the transition to additional training and employment opportunities can and must be created. This applies horizontally to activities at the same level that take place off the building site and vertically to promotion opportunities above the position of *Polier*.

In contrast, in Hungary (and in countries with a comparable training system), opening up opportunities, based on experience, for occupational advancement for skilled workers into middle management positions could have a positive effect on the attractiveness of construction occupations and young workers' motivation to succeed. To date, no such opportunity exists; creating a new opportunity



could increase the attractiveness of the construction occupations and young skilled workers' motivation to succeed. But it would then also be necessary to create new positions in middle management in construction for those who had completed further training. Otherwise, the change in vocational training would, as it were, go nowhere.

In any event, however, the idiographic comparison teaches us that we should be cautious in undertaking changes. Vocational training systems have not taken on their present form by accident, but rather as a consequence of a balance which has come into being with the production system and the social system of reproducing work capacity (Hall and Soskice, 2004; Maurice and Sorge, 2000). Since this relationship has existed for decades, dismantling this context will necessarily prove extremely difficult to execute. It may also have unforeseen negative consequences and unintended side effects.

Under certain circumstances, the Dutch practice of running an educational training path and a training path in parallel within companies is a pragmatic and intelligent way of creating structures which can react flexibly to the different interests and requirements of both employees and companies.

This is because new requirements arising from the employment system can also force changes in vocational training which can only be absorbed with difficulty by an evolved system. Therefore, structural change within the construction industry will lead to increasing technological and organisational requirements being placed upon structures and the construction process. This may well lead to the need for an increase in formal/analytical competence specifically among middle management in the construction industry. While countries in which middle managers in the construction industry already become qualified more through formal knowledge and analytical competences will presumably be able to adapt to this without great difficulty, the career path which is based on experience would come under pressure.

In Germany, some large construction companies already reacted to the proposals some time ago. Without restricting the experience-related further training undertaken by *Poliere*, they have additionally set up internal training paths for some positions in middle management which impart more formal/analytical competence than the conventional training to become a *Polier* but without it being necessary to aspire to the level of a civil engineer at a university.

Thus, the ameliorative function of comparing systems of vocational training can be combined intelligently with the idiographic function. Learning from one's neighbours would then not be a matter of blind

adaptation to alleged 'best practices' whose function and meaning have not been comprehended within their respective context of origin. Instead, it would be a matter of skilfully embedding new elements to strengthen and enrich vocational training within its own social context.

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# Reading

**Section prepared by Bettina Brenner of the Documentation Service with the help of the European network of reference and expertise (ReferNet) <sup>(1)</sup>**

European Union: policies, programmes, studies

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**The art of networking: European networks in education / Holger Bienzle [et al.]**

Vienna: Die Berater Human Concern, 2008 – 127 p.

ISBN 978-39502335-0-6

There is hardly any field of educational action where the notion of network(ing) has not been postulated as a guiding principle and a key competence of practitioners at all levels of the hierarchy. Networks and networking are generally considered to have high potential for solving structural problems in education. In this publication a particular type of educational network is dealt with: European networks in the framework of the EU funding programmes for education and training. It is addressed to professionals in education – teachers, trainers, programme developers, managers, researchers and evaluators – who are already involved in networks or may wish to be so in the future. While the publication has its main focus on adult and school education and their corresponding funding mechanisms in the European Commission's Lifelong Learning Programme – Grundtvig and Comenius – it can be relevant also for other strands of the programme – networks in vocational training, higher education and in the transversal sub-programmes for Languages and Information and Communication Technologies – and even in part for networking activities in other fields such as cultural or regional development.

<http://www.niace.org.uk/euroweaving/docs/The-Art-of-Networking.pdf>

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<sup>(1)</sup> [http://www.cedefop.europa.eu/etv/Projects\\_Networks/Refernet/default.asp](http://www.cedefop.europa.eu/etv/Projects_Networks/Refernet/default.asp)

**Systems, institutional frameworks and processes for early identification of skill needs / Cedefop; Olga Strietska-Illina and Manfred Tessaring**

Luxembourg: Publications Office, 2007. – 234 p. (Cedefop Panorama; 135)  
ISBN 92-896-0391-7 – ISSN 1562-6180

This volume gives an overview of systems of early identification of skill needs in the Czech Republic, Estonia, France, Germany, Ireland, the Netherlands, Romania, the UK, the US and other countries. The publication also presents the results of two workshop discussions. The first one focused on how different levels of identification of skill needs can complement each other and contribute to the national system. The second workshop focused on the implementation of research results in early identification of skill needs into policy and practice.

[http://www.trainingvillage.gr/etv/Upload/Information\\_resources/Bookshop/467/5176\\_en.pdf](http://www.trainingvillage.gr/etv/Upload/Information_resources/Bookshop/467/5176_en.pdf)

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**Future skill needs in Europe: medium-term forecast: synthesis report / Cedefop**

Luxembourg: Publications Office, 2008 – 121 p. (Cedefop information series)  
ISBN 978-92-896-0500-7

This study concludes that demand for skills and qualifications is being driven upwards in most occupations, including in so-called elementary jobs, by the continuing rise of the service sector and sweeping technological and organisational changes. The forecast by Cedefop, the European Centre for the Development of Vocational Training, covers the period up to 2015. It shows that the long transition of European economies away from the primary and manufacturing sectors and towards the service sector is not yet complete. The new Member States in particular are still going through the process. But the transition is gradual: the traditional sectors still employ significant numbers of people and will continue to do so in the medium term. This is the case in all alternative scenarios explored by the forecasting exercise (from 'optimistic' to 'pessimistic').

[http://www.trainingvillage.gr/etv/Upload/Information\\_resources/Bookshop/485/4078\\_en.pdf](http://www.trainingvillage.gr/etv/Upload/Information_resources/Bookshop/485/4078_en.pdf)

### **Employment in Europe 2007**

European Commission, Directorate General for Employment and Social Affairs  
Luxembourg: Publications Office, 2007 – 318 p.

ISBN 978-92-79-06669-6 – ISSN 1016-5444

This is the 19th edition of the Employment in Europe report, which has become one of the main tools of the European Commission in supporting Member States in the analysis, formulation and implementation of their employment policies. *Employment in Europe* provides an overview of the employment situation in the EU, and focuses on a limited number of topics that are high on the EU's employment policy agenda. The overarching themes of this year's edition are a life-cycle approach to work, flexicurity and the evolution of labour income share (i.e. the part of value added that is allocated to labour). The report thus continues to inform the broad policy debate on flexicurity, and also provides analytical support to the Commission Communication on Youth. It contains a Statistical Annex: Macroeconomic indicators, annual percentage growth, key employment indicators, data sources and definitions.

[http://ec.europa.eu/employment\\_social/employment\\_analysis/  
employ\\_2007\\_en.htm](http://ec.europa.eu/employment_social/employment_analysis/employ_2007_en.htm)

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### **Modernisierung beruflicher Bildung: Leitziele und Prioritäten auf dem Weg zum wettbewerbsfähigen Wirtschaftsraum der Welt / Sandra Bohlinger**

[Modernisation of vocational education and training: main objectives and priorities along the route to the most competitive economic area in the world]

Göttingen: Cuvillier, 2007 – 124 p.

ISBN 978-3-86727-154-7

Little knowledge has been hitherto available on the ways in which mechanisms and control instruments function in vocational education and training. The author provides an overview of the basic political strategies and priorities for this field. The influences and effects of these strategies and priorities are identified and highlighted. Strategies investigated include: (1) the introduction of the European Qualifications Framework within the context of national qualifications frameworks including ECTS and ECVET; (2) an analysis of geographical mobility within the context of the political field of vocational education and training; (3) the internationalisation strategies of



vocational education and training including quality assurance and (4) the functions and effects of measures relating to VET for the unemployed and those threatened by unemployment.

## International: information, comparative studies

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### **International perspectives on teachers and lecturers in technical and vocational education / Philipp Grollmann, Felix Rauner (eds.)**

Dordrecht: Springer, 2008 – 334 p. (Technical and Vocational Education and Training: Issues, Concerns and Prospects; 7)  
ISBN 978-1-4020-5703-8

This book provides insight into the history and current status of teaching in technical and vocational education across a broad range of countries. It contains studies of the profiles of teachers and lecturers and their educational practices in: Germany, Brazil, Denmark, China, France, Japan, Norway, Turkey, the UK and the USA. All chapters follow a common structure making it easy for the reader to focus on specific aspects. An overarching introduction embeds the content of the book into the current global context of Technical and Vocational Education and Training.

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### **Work, learning and sustainable development: opportunities and challenges /**

### **John Fien, Rupert Maclean and Man-Gon Park (eds.)**

Dordrecht: Springer, 2008 – 445 p. (Technical and Vocational Education and Training: Issues, Concerns and Prospects; 8)  
ISBN 978-1-4020-8193-4

This book is the first that provides a comprehensive overview of the way countries, education systems and institutions have responded to the call for an integration of learning for work, citizenship and sustainability at the Second International Conference on Technical and Vocational Education which was held in Seoul in 1999. Discussions on the central theme of the Seoul Conference – lifelong learning and training for all, a bridge to the future led to the conclusion that a new paradigm of both development and Technical and Vocational Education (TVET) was needed. This book showcases the wide range of international initiatives that have sought to put such

exhortations into practice. It includes: case studies of national TVET policy reforms, reoriented curricula, sustainable campus management programs, and examples of innovative approaches to integrating learning in TVET with on-the-job training and in community service. It also focuses on the issues and challenges being faced and ways of moving forward. Case studies feature initiatives in a wide range of world regions and countries, and include authors from: UK, Germany, Finland, Canada, USA, Australia, South Africa, China, Republic of Korea, India, Pakistan and the Philippines.

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### **Key indicators of the labour market 2008**

5th ed. Geneva: ILO, 2008 – 1020 p. + CD-ROM  
ISBN 9789221201250

KILM provides a valuable, wide-ranging reference tool to meet the ever-increasing demand for timely, accurate and accessible information on the rapidly changing world of work. It includes all the basic statistics used to calculate 20 key labour market indicators allowing researchers to compare and contrast between economies and within regions across time. The fifth edition of the KILM also includes interactive software which makes searching for relevant information quick and simple.

<http://www.ilo.org/public/english/employment/strat/kilm/>

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### **Vocations and learning: studies in vocational and professional education**

Dordrecht: Springer, 2008 – ISSN 1874-785X

This new peer-reviewed journal provides an international forum for papers on the broad field of vocational learning, across a range of settings: vocational colleges, schools, universities, workplaces, domestic environments, voluntary bodies, and more. Coverage includes such topics as curriculum and pedagogy practices for vocational learning, the role and nature of knowledge in vocational learning, the relationship between context and learning in vocational settings, analyses of instructional practice and policy in vocational learning and education, studies of teaching and learning in vocational education and the relationships between vocational learning and economic imperatives, and the practices and policies of national and transnational agencies.

## **Qualifications systems: bridges to lifelong learning**

Paris: OECD, 2007 – 237 p. (Education and training policy)

ISBN 92-64-01367-4

In the quest for more and better lifelong learning, there is a growing awareness that qualifications systems must play a part. Some countries have started to realise that isolated developments in qualifications standards lead to uncoordinated, piecemeal systems. Countries are now interested in developing broad systemic approaches to qualifications. These broad national approaches and their positive consequences are examined in this book. The authors present nine broad policy responses to the lifelong learning agenda that countries have adopted and that relate directly to their national qualifications system.

## From the Member States

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- DK The Danish approach to quality:  
in vocational education and training / Pia Cort**  
2nd ed. Copenhagen: UVM – Department for Vocational  
Education and Training Programmes, 2008 – 53 p.  
ISBN 978-87-603-2684-4

This is an updated and completely revised edition of the publication first published in 2005. The Copenhagen process was initiated in 2002 with the aim of promoting quality assurance and development in order to enhance mutual trust among the EU member states. In Denmark, quality is built into the very fabric of the Danish VET system by involving all the major stakeholders, and entrusting them with the power to continuously adapt and renew the system in light of social, technological and economic changes. Denmark has no single nation-wide quality approach, but the Danish Ministry of Education has defined nine common principles or measures concerning the policy of quality issues: involvement of stakeholders; common national guidelines; output monitoring; quality rules; ministerial approval, monitoring and inspection; testing and examination; transparency and openness; evaluations by the Danish Evaluation Institute; and international cooperation and surveys. These measures are described within the framework of the CQAF (Common Quality Assurance Framework).

<http://pub.uvm.dk/2008/vetquality2/helepubl.pdf>

DE **Auf dem Weg zum lebenslangen Lernen: die Berufsbildungspolitik der Europäischen Union und die tatsächliche und rechtliche Situation der beruflichen Weiterbildung in der Bundesrepublik Deutschland / Elena Benz**

[Towards lifelong learning: training policy in the European Union and the factual and legal situation of continuing vocational training in Germany]

Frankfurt: Peter Lang, 2007 – 497 p.

(Studien zum Arbeitsrecht und zur Arbeitsrechtsvergleichung; 16)

[Studies on Labour Law and Labour Law Comparison]

ISBN 978-3-631-56449-3

The paper first examines the legal basis for and historical development of vocational training policy in the European Union from its inception to today, before going on to discuss continuing vocational training in Germany in practice and in legislative terms. In doing so, consideration is given not only to purely legal aspects, but also to issues and methods of interest from an economic, social science and educational point of view. In conclusion, and against the background of EU vocational training policy, a number of possible strategies are discussed which might be used to resolve the deficits established by the study in continuing vocational training. Particular attention is devoted to the role of the two sides of industry.

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**Höherqualifizierungs- und Bildungsstrategien anderer Länder / Rainer Voßkamp, Heiko Nehlsen and Dieter Dohmen**

[Higher qualifications and educational strategies of other countries]

Bonn: BMBF, 2007 – 160 p. (Studien zum deutschen Innovationsystem; 04-2007) [Studies on the German Innovation System]

In order to develop educational policy options for the achievement of a higher level of qualification in Germany, an international comparison is being used as the basis of an investigation of how higher qualification is displayed in important OECD states and which higher educational and educational strategies emerge. A quantitative analysis is conducted for 20 OECD states, the educational systems of Germany and seven further countries also being investigated within the scope of case studies.

- EE **2007 national report on the implementation of the Socrates and Leonardo programmes: Estonia / Laura Kirss, Maiu Uus**  
Tallinn: PRAXIS, 2007 – 160 p.

The report assesses the impact of Estonian projects and individual training grants financed from the European Union education programmes Leonardo da Vinci and Socrates (2000-2006) and makes recommendations for the upcoming Lifelong Learning Programme (2007-2013). The first chapter provides a short overview of the programmes, then proceeds with the introduction of the national context, methodology used and participation in the programmes. The publication also shows an overview of participants motivations, national needs met with the help of programmes and dissemination activities carried out in the programmes. The following chapters deal with impact analysis and programme management. The publication concludes with recommendations and suggestions.

[http://www.praxis.ee/data/SOCRATESLEONARDO\\_Report\\_EE\\_final3.pdf](http://www.praxis.ee/data/SOCRATESLEONARDO_Report_EE_final3.pdf)

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- IE **New OECD activity on recognition of non-formal and informal learning / National Qualifications Authority of Ireland**  
Dublin: NQAI, 2007 – 75 p.

This country background report on the recognition of non-formal and informal learning in Ireland has been completed as part of an OECD activity on the 'Recognition of non-formal and informal learning (2006 – 2008)' in which Ireland participates. The report was drafted in 2006/2007 by the National Qualifications Authority of Ireland with the assistance of an Advisory Group and, in particular, the Higher Education and Training Awards Council and the Further Education and Training Awards Council. The aim of the report is to document and review the current scenario in Ireland regarding the recognition of prior non-formal and informal learning. It describes in detail the existing policy with regard to the recognition of prior informal and non-formal learning and the technical and procedural arrangements that have been put in place by Irish institutions and other actors in the area to facilitate the recognition of this learning.

<http://www.nqai.ie/docs/news/OECD.doc>

- ES **Sistema Nacional de Cualificaciones y Formación Profesional / Instituto Nacional de las Cualificaciones**  
[National System of Qualifications and Professional Training]  
Madrid: INCUAL, 2007 – CD-ROM

This CD-ROM produced by the National Institute of Qualifications contains all the relevant legislation starting with Organic Law 5/2002 of 19th June on Qualifications and Professional Training and going up to the end of 2006, as well as the National Catalogue of Professional Qualifications dated January 2007. The CD-ROM contains the structure of the Catalogue organised by families and levels of qualification, the structure of a qualification, the Unit of Competence, the modular Catalogue of Professional Training and the Training Module, etc. After this, it focuses on the qualifications in the Catalogue corresponding to the 26 existing professional families.

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- FR **La formation des enseignants comparée: identité, apprentissage et exercice professionnels en France et en Grande-Bretagne / Régis Malet**  
[Comparative training of trainers: identity, apprenticeship and professional practice in France and in the United Kingdom]  
Brussels: Peter Lang, 2008 – 258 p.  
(Bibliothèque d'études comparatives; 17)  
ISBN 978-3-631-56695-4

Why and how does one become a secondary school teacher in France and Britain? How do new teachers take their place in such a troubled activity nonetheless marked by history, values and vocations? How do they experience the discovery of their profession and how do they plan their future career? What relationships do they form with their trainers, students, colleagues, with their school hierarchy? How can differences be interpreted and lessons learned in terms of teacher training? Based on a wide range of empirical studies conducted in France and Britain, this publication sheds light on the construction of the professional identities of teachers and the systems for learning and practising the profession. It enables both researchers and trainers to broaden their understanding of the thought processes at work in teacher training, and renews the prospects for research in comparative education.

**Les Fiches pratiques de la formation continue 2007 /  
Centre INFFO. Centre pour le développement de  
l'information sur la formation permanente**

[Fact sheets on continuing training 2007 / INFFO Centre.  
Centre for the Development of Information on Continuing  
Vocational Training]

Saint-Denis-La Plaine: Centre INFFO, 2007 – 1040 p. + Folder  
ISBN 2-84821-110-5

The first part of the work, which concerns the beneficiary groups, puts the emphasis on training-access conditions for employees, public servants, jobseekers, self-employed people, handicapped workers and immigrant workers. The second part looks at the players: Public Authorities, companies, approved joint-management collection bodies or OPCAs (Organismes Paritaires Collecteurs Agréés), employee representatives, training and skills-inventory providers, and non-formal-learning validation players. There is a chapter dealing with the European dimension and the intervention of the European Social Fund or ESF, as well as a list of useful addresses and an index.

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NL **Career guidance in the Netherlands / Peter van Deursen,  
Monique Jansen (eds.)**

's-Hertogenbosch: Euroguidance the Netherlands, 2007 – 142 p.

In this publication, policy developments are described and examples of career guidance in the Netherlands are given. The aim of this publication is to provide policy makers and other interested parties in Europe with career guidance practice in the Netherlands. In a resolution of the Council of Europe 'guidance' is defined as follows: In the context of lifelong learning, guidance refers to a range of activities that enables citizens of any age and at any point in their lives to identify their capacities, competencies and interests, to make educational, training and occupational decisions and to manage their individual life paths in learning, work and other settings in which these capacities and competencies are learned and/or used. Examples of such activities include information and advice giving, counselling, competence assessment, mentoring, advocacy, teaching decision-making and career management skills. To avoid ambiguity, since a variety of terms are used in Member

States to describe services engaged in these activities, including educational, vocational or career guidance, guidance and counselling, occupational guidance/ counselling services, etc., the term guidance is used to identify any or all of these forms of provision and Member States should interpret the term as referring to the appropriate provision in their own countries.

[http://www.cinop.nl/advies/algemeen/docs/euroguidance/  
Career\\_Guidance\\_in\\_%20the\\_Netherlands/  
Career%20Guidance%20in%20the%20Netherlands.pdf](http://www.cinop.nl/advies/algemeen/docs/euroguidance/Career_Guidance_in_%20the_Netherlands/Career%20Guidance%20in%20the%20Netherlands.pdf)

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AT **Situated competence development through innovative apprenticeships: the role of different stakeholders / International network on innovative apprenticeship conference**

Vienna, 01-02 February 2008. Vienna: ibf, 2008 – 195 p.

This conference, in Vienna on 1st-2nd February 2008, was an important international event in apprenticeship research. The International Network on Innovative Apprenticeship (INAP) was founded by a group of international researchers that met at the University of Bremen in 2006 to discuss findings of a joint research project that started in 2005 looking at the relation between cost, benefits and quality of apprenticeships. INAP has subsequently drawn together researchers from a range of countries and discipline backgrounds in a research program and in an exchange of information and ideas. The group of researchers gathered together in Vienna for this conference represents 13 countries, and papers are in three main areas of interest: Levels of governance and the role of stakeholders in apprenticeship, Designing optimal conditions for competence development through workplace learning and Costs, benefits and quality of apprenticeships.

The international conference, which organised by ITB (Institut Technik und Bildung, University of Bremen), in cooperation with the European Educational Research Association (VETNET) and supported by the Bertelsmann Foundation, Germany, concluded that, at least by comparison to other countries, apprenticeship is on its way up.

[http://www.oeibf.at/\\_TCgi\\_Images/oeibf/  
20080212124456\\_Proceedings%20INAP%20\(06-02-2008\).pdf](http://www.oeibf.at/_TCgi_Images/oeibf/20080212124456_Proceedings%20INAP%20(06-02-2008).pdf)



PT **Inquérito ao Impacto das Acções de Formação Profissional nas empresas 2002-2004**  
**[Survey on the Impact of Vocational Training Actions on the Enterprises 2002-2004.]**

Lisbon: GEP, 2008 – 49 p.

(Estatísticas – Formação Profissional; 19)

ISBN 978-972-704-300-2

The 'Survey on the Impact of Vocational Training Actions on the Enterprises 2002-2004', carried out in 2005 by the Directorate General of Studies, Statistics and Planning of the Ministry of Labour and Social Solidarity, and addressed to enterprises with 10 and more employees, aimed mainly to get information on the employers' opinion on the eventual connection between the existence (or non-existence) of Vocational Training Actions performed or promoted by enterprises over the reference period and on the changes observed (or not) in the several aspects of the enterprises functioning, such as technology and organization, productivity, quality and competitiveness, and also, employability and working conditions.

<http://www.dgeep.mtss.gov.pt/estatistica/formacao/impacto20022004.pdf>

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SK **Jobs for youth: Slovak Republic**

Paris: OECD, 2007 – 110 p.

ISBN 978-92-64-03269-9

OECD has launched a series of reports on the school-to-work transition process in sixteen countries including the Slovak Republic. Each report surveys the main barriers to employment for young people, and assesses the adequacy and effectiveness of existing measures to improve the transition from school to work. Each report also provides a set of policy recommendations for further action by the public authorities and social partners.

FI **Adult apprenticeship training: developing competitiveness and competence / Tea Sepl. Palmenia Centre for Continuing Education**

Helsinki: University of Helsinki, 2007 – 109 p.  
ISBN 95-210-3997-3

This adult apprenticeship publication describes a specific apprenticeship programme developed in Finland. It is aimed at adults, emphasising concepts such as lifespan, tacit knowledge and the life experience adult learners have gathered over years. The book is divided into three main themes: (1) apprenticeship in the Finnish educational system, (2) the best educational practises in adult apprenticeship, (3) and the implementation and benefits of adult apprenticeship in working life.

[http://www.aikuistenoppisopimus.fi/ajankohtaista/Ajankohtaista\\_tiedostot/optioenglanti.pdf](http://www.aikuistenoppisopimus.fi/ajankohtaista/Ajankohtaista_tiedostot/optioenglanti.pdf)

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SE **Labour market programmes and labour market outcomes: a study of the Swedish active labour market interventions / Jerome Adda [et al.]**

Uppsala: IFAU, 2007 – 65 p. (IFAU working paper; 2007:27)  
ISSN 1651-1166

This paper assesses the impact of Swedish welfare-to-work programmes on labour market performance including wage, labour market status, unemployment duration and future welfare-to-work participation. The authors develop a structural dynamic model of labour supply which incorporates detailed institutional features of these policies and allows for selection on observables and unobservable. They estimate the model from a rich administrative panel data set and show that training programmes – which account for a large proportion of programmes – have little effect on future outcomes, whereas job experience programmes have a beneficial effect.

<http://www.ifau.se/upload/pdf/se/2007/wp07-27.pdf>

**Demographic changes, labour migration and  
EU-enlargement: relevance for the Nordic regions /  
Ingi Runar Edvardsson [et al.]**

Stockholm: Nordregio, 2007 – 149 p.

(Nordic Research Programme 2005-2008; Report:2)

ISSN 1654-2290

This study analyses what effects and impact ageing, structural change in the economy and broader international trends, especially the EU-enlargement, will have on the future demand for labour in Danish, Finnish, Icelandic, Norwegian and Swedish regions. The following questions were raised in order to shed light on the research topic: How have structural changes in the economy affected labour demand in the Nordic countries? How has the EU-enlargement affected international mobility and migration in the Nordic and Baltic Sea areas? To what degree are immigrants active on the Nordic labour markets and to what degree do their labour market participation rates vary across the different regional labour markets? Has international competition and regional attractiveness in the Nordic countries changed in the last decade due to EU enlargement? How has this process affected outsourcing and the offshoring of production and services? How have international trends, and EU enlargement in particular, affected the mobility of capital and labour? What implications does this new labour mobility trend have for both the countries of origin and destination?

<http://www.nordregio.se/Files/NRP2005-8R2.pdf>

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**UK Apprenticeship: a key route to skill /  
House of Lords, Economic Affairs Committee**

Norwich: The Stationery Office, 2007 – 52 p.

This report details how the UK has an excellent record in higher education but a poor record in providing skills for the rest of the population. Apprenticeship gives young people the skills that employers demand, which in turn boosts their wages. In most European countries, such systems are the main route to skill for up to half of all young people. In Britain, by contrast, many who could and should benefit from apprenticeship have not done so. To rectify this situation, urgent action is required:

- (1) Many young people leave school without the basic functional

literacy and numeracy required for apprenticeship. Early action by the Government is needed to improve this situation. (2) Many schools fail to inform many students about apprenticeship. By the age of 14, all school pupils should be fully informed about the opportunities provided by apprenticeship. (3) Problems also surround the apprenticeship programmes themselves. The Government has given individual employers too little involvement in how apprenticeships are run, rendering them little more than passive partners. Employers need to be at the centre of apprenticeship provision. Within five years, all Government funding for apprenticeships should go directly to employers, rather than through training providers as happens today. Apprenticeship schemes have suffered from too much emphasis on quantity over quality. Completion rates for advanced apprenticeships remain unacceptably low. Progression through the different levels of apprenticeship and on to higher education also needs to be greatly improved. Successive Governments, not least the present Government, have provided poor leadership in tackling these

<http://www.publications.parliament.uk/pa/ld200607/ldselect/ldeconaf/138/138.pdf>

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**Guide to vocational education and training /  
Christopher Winch and Terry Hyland**

London: Continuum, 2007 – 121 p.  
ISBN 08-264-9047-6

This is an accessible and clearly written survival guide to Vocational Education and Training in the UK. Christopher Winch draws on recent research to answer key questions such as: Why is VET such an important area? How can European models be used to develop VET in the UK? How is VET structured and provided? And, what are the main issues facing VET today?







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#### Dossier: Welcome to Bulgaria and Romania

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- New trends in initial vocational education and training in Bulgaria (Penka Ganova)
- Challenges and perspectives of the adult vocational training system in Bulgaria (Elka Dimitrova)
- The contribution of European vocational training policy to reforms in the partner countries of the European Union (Jean-Raymond Masson)

#### Research

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- Education in values and moral education in vocational colleges (Sigrid Lüdecke-Plümer)
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- Contemporary national strategies in vocational education and training – convergence or divergence? (Anders Nilsson)

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- The European qualifications framework: challenges and implications in the Irish further education and training sector (Lucy Tierney, Marie Clarke)



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Articles submitted to the journal must be precise, yet accessible to a wide and diverse readership. They must be clear in order to be understood by readers from different backgrounds and cultures, not necessarily familiar with the vocational education and training systems of different countries. Readers should be able to understand clearly the context and consider the arguments put forward in the light of their own traditions and experience.

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European Centre for the Development  
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Europe 123, 570 01 Thessaloniki, GREECE  
Postal address: PO Box 22427, 551 02 Thessaloniki, GREECE  
Tel. +30 2310490111, Fax +30 2310490020  
E-mail: [info@cedefop.eu.int](mailto:info@cedefop.eu.int)  
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