



Early identification of skill needs in Europe

Rapid social and economic changes raise the question of how future-oriented skills and competences can be identified early and how education and training should be shaped to meet future skill needs.

The German Ministry of Education and Research and Cedefop organised a conference in May 2002 to explore these questions focusing on the early identification of skill needs, intending to lay the foundations for intensified future European cooperation.

The conference proceedings show the challenges education and training are facing are common to all European countries. They also discuss the wide range of activities and approaches on how to identify new skills emerging at national, sectoral and regional levels.

This initiative is a starting point for future cooperation and networking between researchers, policy-makers, social partners and practitioners across European countries.

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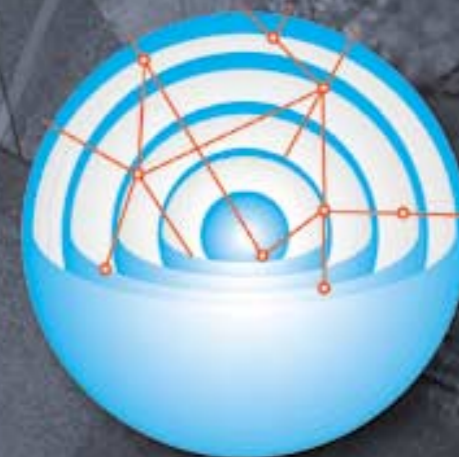
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Table of contents

■ <i>Susanne Liane Schmidt, Klaus Schömann, Manfred Tessaring</i> Introduction. Early recognition of skill needs in Europe	3
■ <i>Manfred Kremer</i> Welcome and opening of the European conference 'Early recognition of skill requirements in Europe', 30 May 2002, Social Science Research Center Berlin	11
■ <i>Stavros Stavrou</i> Early recognition of skill requirements in Europe	18
PART I Initiatives and research on 'Early identification of skill needs' in Europe at national level	
■ <i>Susanne Liane Schmidt</i> Early identification of qualification needs in Germany – the FreQueNz research network	24
■ <i>Mike Coles</i> Qualifications for the future	42
■ <i>Jordi Planas</i> Developing prospective tools for the observation of skill requirements in Spain	56
■ <i>Mario Gatti</i> Network of national surveys on skill needs in Italy	63
■ <i>Frank Cörvers</i> Labour market forecasting in the Netherlands: a top-down approach	72
PART II Initiatives at sectoral level	
■ <i>Jean-Louis Kirsch</i> Industrial maintenance in France: new and traditional skill requirements	86
■ <i>Tom Leney</i> Identifying future qualification needs in the transport sector in the United Kingdom: has the scenarios methodology a role?	106
■ <i>Martin Curley</i> Addressing the ICT skills shortage in Europe	122
■ <i>Kathrin Schnalzer, Gerd Gidion, Miriam Thum, Helmut Kuwan</i> New skill requirements in logistics	128

- *Gert Alaby*
Skill requirements in the care of the elderly – the Swedish example 142
- *Norbert Bromberger, Helen Diedrich-Fuhs*
Information system for early recognition of sectoral trends –
results obtained for the construction industry 151

PART III Initiatives for specific target groups and SMEs

- *Gerard Hughes, Jerry J. Sexton*
Forecasting female shares of employment by occupation in Ireland 164
- *Beate Zeller*
Services in complex structures – trends in the way skills
are developing in low skilled work 178
- *Peter Wordelmann*
Early recognition of international qualifications for SMEs 189
- *Lothar Abicht, Rainer Werner*
New qualifications in SMEs for societal and technological change –
skilling of IT users 207

PART IV Initiatives at regional level and in countries in transition

- *Ferran Mañé, Josep Oliver*
A note on the evolution of labour
supply in Spain and its implications at regional level 230
- *Olga Strietska-Illina*
Qualitative versus quantitative methods of anticipating skill needs:
perspective of a country in transition 242
- *Pal Tamas*
Skill markets in a learning society: transformation
and vocational reforms in Hungary 264
- *Lewis Kerr*
A demand-side analysis of SME skills needs
in regions of five candidate countries 286

Résumé and perspectives

- *Manfred Tessaring*
Identification of future skill requirements. Activities and approaches
for European cooperation 306

Annex

- List of authors 328
- Abbreviations 331

Introduction

Early recognition of skill needs in Europe

European Conference, Berlin, 30/31 May 2002

Increasing globalisation and internationalisation of labour markets and the ensuing changes in education and training systems represent a challenge for the countries of Europe. The Lisbon European Council set an ambitious goal in 2000: *'The Union has today set itself a new strategic goal for the next decade: to become the most competitive and dynamic knowledge-based economy in the world, capable of sustainable economic growth with more and better jobs and greater social cohesion.'*⁽¹⁾ This goal was subsequently made more specific, especially in terms of establishing lifelong learning as a basic principle governing education and training systems.

The questions that now come to the foreground are what form sustainable skills could take and how education and training systems need to be structured, in order to master these new challenges and achieve these goals.

To explore these questions, the German Federal Ministry of Education and Research (BMBF) and the European Centre for the Development of Vocational Training (Cedefop) jointly held a two-day conference in May 2002 involving experts from various European countries. The conference, which was held at the *Wissenschaftszentrum* in Berlin (Social Science Research Center Berlin), focused on the early identification of skills needs and on intensifying international cooperation in this area.

A total of 45 experts from Germany and other countries attended the conference. Representatives of political institutions and research institutes in EU Member States (Germany, France, Greece, UK, Ireland, Italy, the Netherlands, Spain and Sweden) were joined by experts from candidate countries (Estonia, Lithuania, Slovenia, the Czech Republic and Hungary). Cedefop and the European Training Foundation (ETF) represented the EU level, while business was represented by a speaker from Intel on behalf of Career Space, a consortium of major ICT companies.

Key aspects of the topic, presentations of results and other conference objectives, were discussed in the context of creating a single European

⁽¹⁾ These and other European Council conclusions can be downloaded in various languages from <http://ue.eu.int/presid/conclusions.htm>.

education and labour market. The emphasis was on research aimed at the recognition and early identification of skills needs. The field of early identification of skills needs is becoming increasingly important: in a world of work that is experiencing turbulent times, political and business players are having to respond ever faster to change. To do this they depend on reliable information. As the countries of the European Union grow closer, and with the accession of candidate countries on the horizon, it is becoming ever more important to exchange information in order to make it possible for players to identify in good time the way in which skills are developing. The early identification of skills can greatly help training systems become more future-oriented and prevent or lessen future skills mismatches on the labour market.

As the conference showed, what is needed to achieve this is, first of all, an exchange of good practices on the early identification of skills needs and the available methods. The conference was also intended to lay the foundations for future joint procedures and for developing a European network.

Conference: Early recognition of skill requirements in Europe
Berlin 30-31 May 2002, Social Science Research Center Berlin

Thursday, 30 May

Opening

Welcome: Federal Ministry of Education and Research, *Manfred Kremer*
Speech of the Cedefop Deputy Director, *Stavros Stavrou*

I. Initiatives on 'Early recognition of skill requirements' and research projects in Europe

Moderation: *Manfred Tessaring*
Short presentations and discussion of initiatives in Member States
Introduction: *Klaus Schömann*,

Susanne Liane Schmidt

United Kingdom: *Mike Coles*

Spain: *Jordi Planas*

Italy: *Mario Gatti*

Summary: *Frank Cörvers*

II. Initiatives on 'Early recognition': best practice examples for different sectors

Moderation: *Klaus Schömann*
Short presentations and discussion
Industrial maintenance, *Jean-Louis Kirsch*
Transport sector, *Tom Leney*
ICT sector, *Martin Curley*
Logistics, *Kathrin Schnalzer*, *Miriam Thum*
Healthcare, *Gert Alaby*
Construction industry, *Norbert Bromberger*

Friday, 31 May

III. Initiatives on 'Early recognition': best practice examples for specific target groups and SMEs

Moderation: *Susanne Liane Schmidt*
Short presentations and discussion
Gender, *Gerry Hughes*
Disadvantaged/low skilled, *Beate Zeller*
Early recognition of international qualifications, *Peter Wordelmann*
New qualifications in SMEs, *Lothar Abicht*

IV. Initiatives on 'Early recognition': best practice examples at regional and European level

Moderation: *Manfred Tessaring*
Skill shortages in Spain, *Ferran Mañé*
EU and candidate countries, *Olga Strietska-Illina*
Qualification systems at the turning point of societal modernisation, *Pal Tamas*
Regional initiatives in five candidate countries, *Lewis Kerr*

V. Final discussion

Moderation: *Klaus Schömann*

VI. Preparation of an international congress early 2003

Moderation: *Manfred Tessaring*
Discussion: Objectives, agenda, networking, cooperation

Main conference topics and conference proceedings

The main elements of the conference were presentations of national initiatives and regional, sectoral and target-group-oriented activities designed to achieve early identification of skills needs. Various levels were considered, namely the micro, intermediate and macro levels. It also became clear that a wide range of approaches were involved, from 'traditional' quantitative projections to more qualitative approaches such as scenarios and case studies. In the conference proceedings presented here, individual contributions follow the order of the conference programme.

The papers are presented under four subject headings (echoing conference sections):

- Initiatives on early identification of skills needs in Europe at national level
- Initiatives on early identification of skills needs in various sectors
- Initiatives on early identification of skills needs for specific target groups and SMEs
- Initiatives on early identification of skills needs at regional level and in countries in transition.

Initiatives on 'Early identification of skill needs' in Europe at national level

Under this subject heading, several individual national initiatives are presented by way of example. The introductory presentation (*S.L. Schmidt*) provides an overview of the early identification initiative of the German Federal Ministry of Education and Research and the existing research network. The British contribution (*M. Coles*) focuses on the problem of the reliability of data sources and of forecasts of, and scenarios for, future skills needs. The Spanish contribution (*J. Planas*) addresses the development of forecasting tools and the development of a "skills observatory" that will collect and evaluate skills needs. The next contribution (*M. Gatti*) presents the Italian survey network for new skills needs. The last contribution under this heading (*F. Cörvers*) considers methods and results of quantitative labour market and skills projections in the Netherlands.

This Part gives readers a good insight into established networks and activities related to the early identification of skills, which have adopted a variety of approaches and methods. The fundamental problems have proved to be very similar in many countries. This applies, for example, to the networking of different vocational training research players and hence the collation of different data sources and analytical procedures, as well as to the long-term reliability of quantitative skills forecasts.

Initiatives on ‘Early identification of skill needs’ at sectoral level

This Part focuses on contributions investigating future skills needs in various sectors: industrial maintenance, the automotive and transport sector, information and communications, logistics, health care and construction.

The French presentation (*J.-L. Kirsch*) on industrial maintenance shows that owing to organisational and technological innovations enterprises will be seeking new skills in the future. The contribution from the automotive and transport sector (*T. Leney*) outlines the scenario method of identifying future skills needs in the UK transport sector. A contribution from Intel (*M. Curley*), representing the Career Space Consortium, discusses the broad area of the information and communications sector and in particular the skills gaps apparent within it. The contribution on logistics (*K. Schnalzer et al.*) concentrates on in-company skills development by means of qualitative and quantitative analysis. The Swedish contribution (*G. Alaby*) on the health care sector identifies the ageing of society as a factor triggering new skills needs. The last contribution in this Part (*N. Bromberger and H. Diedrich-Fuhs*) addresses the early identification of company skills trends in the construction sector in Germany.

These contributions illustrate the variety of approaches to specific subject areas in the early identification of skills needs. Job monitoring, company case studies, expert discussions and networks of specialists are all used to answer specific questions about skills trends, as are scenario-based methods and statistical evaluations. However, it is not possible immediately to transfer individual results to other European countries, although parallel trends can be identified.

Initiatives on ‘Early identification of skill needs’ for particular target groups and SMEs

Skills trends have specific implications for different target groups, and these are brought out in the first two contributions in this Part. The presentation on forecasting the proportion of women in employment in Ireland (*G. Hughes and J.J. Sexton*) analyses data on occupations and investigates future areas of activity in which female employment in particular will increase. The forecast makes it possible to assess future employment opportunities and to develop measures supporting the women’s participation in employment. The next contribution (*B. Zeller*) outlines the specific situation of low-skilled people. Despite the forecast reduction in simple jobs, work requirements in this area are changing. This paper from the German early recognition initiative shows, by way of example, how enterprise changes affect the performance of simple jobs and the skills required of employees.

The last two contributions in this Part concentrate on skills trends that are posing particular challenges, above all for SMEs (small and medium enterprises). The development of international skills is also becoming increasingly relevant to smaller enterprises: the rapid globalisation of the economy means that ever more jobs involve internationally oriented tasks, as shown in the paper on early recognition of international skills (*P. Wordelmann*). However, changes in society and technology are also necessitating the development of new skills, as required, for example, by the use of particular IT applications. These problems are described in the contribution from the German early recognition initiative on new skills in SMEs, with particular emphasis on training IT users (*L. Abicht and R. Werner*).

The targeted approach adopted makes it clear that experience acquired at sectoral level can be incorporated into various other fields of application in order to achieve positive effects on employment for specific target groups.

Initiatives on ‘Early identification of skill needs’ at regional level and in countries in transition

The first paper under this heading (*F. Mane*) looks at skills gaps and worker shortages in Spain. It focuses on the characteristics of demographic change and the results of two forecasts, one for Spain as a whole and one for the region of Catalonia.

The next three contributions address the specific problems of countries that are candidates for accession to the EU. First comes the Czech contribution (*O. Strietska-Ilina*), which offers an insight into the prospects for a country in transition and discusses qualitative and quantitative methods of forecasting skills needs. Next, the Hungarian paper (*P. Tamas*) outlines the pressure on skills systems to change as a result of the modernisation of society. Finally the representative of the European Training Foundation (*L. Kerr*) presents initiatives for forecasting skills needs by discussing the goals, methods and results of a demand-based skills survey carried out in selected regions of five candidate countries.

The contributions under this heading show that systems for the early identification of skills display area-specific characteristics. Their design and method of implementation must therefore take into account the features of the sector, region and country.

Conference results

The conference aimed to initiate cooperation throughout Europe, to increase the exchange of information on approaches, methods and results in respect of early identification of skills needs, and to instigate the formation of a transregional and transnational network. Such a network was not intended to be restricted to the research sphere, but to include the relevant stakeholders in all fields – policy, practice, social partners, etc.

All participants unanimously confirmed the necessity of these objectives, not least because (as shown by the papers brought together in this volume) a very wide range of methods and approaches are being used by different countries and experts, and as yet these activities are insufficiently transparent. Some countries have already made a lot of progress, while others are still in the early stages, either owing to a lack of appropriate experience and competence or because the relevant organisational and statistical infrastructure or political support is as yet inadequate. However, it is often difficult to gain access to this information (not least for language reasons). So far there has not been much cooperation across national borders, despite some recent progress.

In the plenary session that closed the conference, it was argued that EU-level research into early identification should not be restricted to a discussion of methodological and theoretical aspects and results. Possible courses of action should also be developed in support of policy, practice and the social partners, with emphasis on the sectoral and regional levels. It was also

argued that a further objective should be to develop ‘early recognition or identification standards’, which could help to match skills needs and skills profiles. This could also make it easier to compare national methods and results. Countries still in the early stages of researching early identification or currently developing or planning the relevant infrastructure (including candidate countries) should be more closely involved in this.

Against this background, the conference presented in this publication not only offers an inventory of activities in various European countries but also represents a starting point for intensive future cooperation, both between experts and research institutes in different countries and between research, policy and practice. This exchange is aimed at accelerating the continued development of methods and approaches and of mutual learning via transnational cooperation in research. Furthermore, it is essential for policy-makers and practitioners (including the social partners) to be involved from the outset. In this way, all those responsible are made aware that it is necessary for education and training to be sustainably designed on the basis of specific information and recommendations, and they are encouraged to provide staffing, financial and organisational support for the efforts involved.

These are some ways in which cooperation and transparency could be promoted:

- Establishment of a transnational *network*, for which an organisational framework needs to be created, equipped with the necessary staff and resources.
- Creation of a *website* or *Extranet* as a discussion platform for network members. Appropriate infrastructures are already available and could be linked with one another, such as the website of the German FreQueNz Early Recognition Initiative and Cedefop’s electronic communication platforms (Electronic Training Village, Cedefop Research Arena and European Research Overview).
- A mutual *exchange* of methods, approaches, projects and results as regards the early identification of skills needs, via regular documented expert conferences or seminars involving researchers, policy-makers and practitioners in various countries.
- Specific *cooperation* between research institutes in various countries on particular projects, including expert visits and exchange.
- Preparation and continued updating of an ‘*early identification handbook*’ and a ‘*European report on skills development*’, which should also be made available on the Internet.
- Development of an *information and documentation database*, involving all members of the network and giving access to external sources.

The final paper in these conference proceedings (*M. Tessaring*) summarises the early identification activities and discusses the prospects for European-level cooperation.

Other planned activities

The proceedings of the European conference on early identification are being published in both English and German. Cedefop is publishing the English version, while the German version forms part of the FreQueNz series. ⁽²⁾

The contributions and findings of the European conference held in May 2002 are also being used in preparing and orienting an international conference on early identification of skills needs. This conference will be held at Cedefop's headquarters in Thessaloniki in May 2003, on the occasion of the Greek Presidency of the EU.

***Susanne Liane Schmidt,
Klaus Schömann,
Manfred Tessaring***

⁽²⁾ Schmidt, S.L.; Schömann, K.; Tessaring, M., eds. Früherkennung von Qualifikationserfordernissen in Europa. Qualifikationen erkennen – Berufe gestalten. H.-J. Bullinger, ed. Bielefeld: Bertelsmann, 2003.