

European Commission Trend Chart Workshop on "Increasing the Impact of Lifelong Learning on Innovation"

1. Lifelong learning as a basic element of a European model of society

The EU Memorandum on Lifelong Learning, the Communication by the European Commission and the Council Resolution have supported the activities which the BMBF has conducted in the area of lifelong learning since 1999. At the same time, with its Communication entitled "Making a European Area of Lifelong Learning a Reality", the European Commission has continued its policy to improve education, vocational training and continuing education.

For many years, lifelong learning has been the subject of political debate and strategic considerations in Germany involving not only the Federal Government, the *Länder* and the regions but also the social partners and non-governmental organizations, for example continuing education providers.

It is more important than ever for people to acquire knowledge and skills in order to be able to benefit from the advantages of the education society and be able to meet new challenges. The German side supports lifelong learning as a basic element of a European model of society and a major priority of a European employment strategy. It is our common goal to increase people's employability and adaptability and to make European industry more dynamic and competitive. The aim of lifelong learning is to encourage personality development in all citizens, to foster democracy, citizenship, social cohesion, tolerance and human rights and to prevent right-wing extremism, discrimination, racism and xenophobia.

2. Implementation of the lifelong learning strategy initiated in Germany

The strategy of lifelong learning is being implemented in Germany in all areas of education and qualification, including vocational training and continuing education; relevant activities

are organized jointly by the Federal Government, the *Länder*, labour and management. The strategy of lifelong learning has been debated in legal bodies and has been developed through deliberations within the framework of the Alliance for Jobs, Training and Competitiveness, the Education Forum and the Concerted Action in Continuing Education.

By promoting lifelong learning at all levels of the education system, particularly within the framework of initial and continuing vocational training as well as continuing education, the Federal Government and the *Länder* have made a major contribution towards improving employability and preventing unemployment. The improvement of access to education and training, support for disadvantaged persons and the organization of programmes near participants' homes are central aspects in further development at all levels of education and have become essential in the reform projects conducted in Germany.

Since 1998 the federal education and research budgets have been increased, and numerous programmes and measures concerning lifelong learning have been launched.

3. A partnership approach in developing coherent general strategies for lifelong learning

The division of responsibilities depends on the structures prevailing in Germany, in other member states and at European level. Owing to the division of competence, reforms across educational sectors will not be successful unless all those concerned – that is, European Commission, member states, social partners, associations and providers – work together more closely.

Further development of lifelong learning in Germany focusses on the following points:

- Networking and cooperation at all levels
- Increasing individual responsibility and self-direction by learners
- Improving the user orientation of programmes
- Promoting equal opportunities
- Implementing future goals in education and training
- Introducing and implementing a new culture of teaching and learning
- Enhancing transparency and counselling services
- Quality development and quality assurance, also in international competition.

Example 1: Alliance for Jobs and Education Forum: Support of non-formal learning and quality assurance as complementary instruments

Following the German position on the EU Memorandum on Lifelong Learning and in view of the increasing significance of non-formal learning, including learning in the process of work and in private and social life (to acquire, for example, team skills and communication skills), the Federal Government, the *Länder* and the social partners have, within the Alliance for Jobs and the Education Forum, agreed specific measures for the recognition of skills acquired outside formal education and their inclusion in formal education processes.

The promotion and recognition of non-formally and informally acquired skills and competencies can contribute substantially to motivating people to engage in lifelong learning and to increasing their mobility. Owing to the structure of the German education system (for example, owing to the great importance of certificates), non-formal and informal learning in Germany have in the past not been as important as in other member states. Therefore, Germany intends to give increasing support and recognition to non-formal and informal learning in the future.

Non-formal learning and quality assurance are not a contradiction in terms; they are complementary instruments of a long-term education reform. Therefore, quality assurance and quality enhancement in education will remain essential prerequisites for the further development of national education systems.

Quality assurance, particularly in continuing education, is necessary also from the aspect of consumer protection.

Example 2: BMBF action programme entitled "Lifelong Learning for All"

In early 2001, the Federal Ministry of Education and Research launched an action programme, outlining specific fields of action and pooling relevant measures to help us on our way towards becoming a learning society. With these actions, the BMBF aims to contribute – within the framework of federal responsibilities – to lastingly supporting lifelong learning by all people and to promoting the future-oriented reform of educational structures.

The action programme includes, and relates to each other, the research, development and testing measures which the Federal Government intends to take in the individual sectors of education to support lifelong learning.

The strategy which the programme outlines for implementing lifelong learning is to contribute to the creation of an environment which is conducive to learning and to the establishment of equal opportunities through improved access to education and training. The aim is to reduce tendencies of discrimination and to introduce hard-to-reach and disadvantaged groups of people to continuous learning. The Federal Government therefore focusses on providing support and incentives.

The central themes are:

- Increasing individual responsibility and self-direction by learners
- Reducing inequality of opportunity
- Encouraging cooperation between providers of programmes and participants
- Strengthening relations between all sectors of the education system.

The fields of action outlined by the BMBF's "Lifelong Learning for All" action programme are the following:

- Networking across educational sectors and providers at regional and supraregional level
- Quality assurance
- Increasing the transparency of offerings
- Certification and comparability of final qualifications
- Improving advice and motivation
- Promoting new cultures of teaching and learning
- Creating an environment conducive to learning for people in special situations
- Intensifying exchanges and international cooperation, enhancing international skills.

Various sub-programmes deal with these central themes and fields of action. Some cases in point are:

A) Programme entitled "Learning Regions – Providing Support for Networks"

The development of learning regions is the central goal of the BMBF action programme "Lifelong Learning for All". The funding programme entitled "Learning Regions – Providing

Support for Networks", which was launched in late 2000, is supporting the establishment and further development of regional networks. In these networks, as many stakeholders as possible (including, for example, education institutions, course participants and participants in self-directed learning, companies, the social partners, youth offices, employment offices and sociocultural institutions) cooperate closely in the design, testing and long-term implementation of innovative lifelong learning projects. An estimated 118 million euro (from the federal budget and the ESF) will be made available for the period up until 2006 in support of such activities.

The programme aims to modernize the local basis and structures of education and continuing education in a way which enables participation by the greatest possible number of people and a more large-scale implementation of the concept of the learning society. Providers of education and learners as well as other regional actors are to cooperate more closely and effectively than in the past, they are to become "learning regions", as it were.

The networks are to carry out innovative projects which pursue the following goals:

- improving opportunities for transfer between different sectors of the education system,
- improving the links between general, political, cultural and vocational education as well as enhancing the cooperation between education, employment and labour market policies, economic development policy and other policies in order to promote people's skills and employability,
- increasing customer orientation and the transparency of course offerings, for example by means of integrating information, counselling and placement and by providing new services,
- improving the quality and use of educational offerings, for example by agreement of common quality criteria and by an exchange about the processes of quality development,
- developing and testing modules of further training of staff, including methods of learning, advice and support for learners and network management,
- increasing people's creativity and responsibility with new formal and informal learning arrangements,
- developing and testing methods for joint certification of learning success,
- improving access to new information and communication technologies, promoting media skills and testing new learning arrangements.

Support is currently given to 53 projects proposed under the first call and to 29 projects of the second call. Starting in 2003, transfer projects cutting across the German *Länder* will possibly be funded in addition.

B) BLK pilot programme on lifelong learning

The pilot programme of the Bund-Länder Commission for Educational Planning and Research Promotion aims to initiate new forms of cooperation across educational sectors within and between the German *Länder* to promote lifelong learning. The main goal is to increase individual responsibility and self-direction by learners and to improve cooperation between the providers of education programmes and potential participants.

The Federal Government and the *Länder* each provide an annual amount of 2.5 million euro over a period of five years. Additional ESF co-funding has been used to establish further focuses since 2001. Cross-*Länder* collaborative projects for quality assurance and for the certification of skills and competencies are being funded.

C) Programme entitled "Learning Culture for Skill Development"

Another important research and development programme launched in 2000 by the Federal Ministry of Education and Research is entitled "Learning Culture for Skill Development". This programme aims to establish efficient structures for continuing learning while placing special emphasis on the learning intensity of workplaces. Further goals are to improve individual vocational skills and to develop strategies for the preservation of the skills of unemployed people. The main focus is on promoting the vocational learning culture, including the integration of learning into the process of work, which is not only important for workers but is also becoming a crucial competitive factor for enterprises. Furthermore, projects are being carried out under this programme to improve transparency and counselling as well as quality assurance in continuing vocational education and to test new forms of certification, also for informally acquired knowledge and skills. Between 2001 and 2007, annual amounts of about 17.5 million euro will be made available from the federal budget and from the ESF.

Learning in the process of work

The complexity of changes in working life strongly affects the dynamics of learning as well as the content and forms of learning. It is becoming increasingly necessary to ensure that learning is geared to processes and that the possibilities of new information and communication technologies are used. Modern and innovative work includes learning. The

traditional separation between work and learning is increasingly being abandoned in modern economic processes.

There is general agreement that informal learning in the process of work is very important for personal and professional development, as it enables people to continuously adapt their knowledge and skills to changing requirements in everyday life and the world of work. It is a largely undisputed fact that skills development and flexibility of the labour force are not only major competitive factors for business enterprises but also essential prerequisites for mastering structural change. Nevertheless, most of the skills acquired informally in the process of work are not verifiably assessed and are therefore not part of the individual's educational record. The BMBF has set the stage for dealing with substantial aspects of this problem. In this connection, the Federal Institute for Vocational Training is carrying out a project for recording and assessing informal skills acquired in the process of work. The aim is to reveal the current state of affairs in Germany and to give an insight into European approaches and developments.

Example 3: Supporting lifelong learning as a key element of political action – experts commission on the financing of lifelong learning

The European Commission intends to apply existing instruments without increasing funds, but at the same time it notes that the goals mentioned in the action programme require additional financial commitments.

The German position on the Memorandum on Lifelong Learning emphasizes the necessity of making available additional Community funding for lifelong learning. This means for example that increasing amounts of the EU's structural funds, above all the European Social Fund, should be used in the education sector to support lifelong learning. Germany also requests that additional funds should be made available under the Community's Leonardo da Vinci and Socrates programmes.

With its increased education and research budget, the Federal Government supports major reform projects within the framework of programmes and measures designed to promote lifelong learning. The German *Länder*, too, have made considerable efforts.

The strategy employed in promoting lifelong learning needs to be re-considered and developed further. A key element of political action is the financing of lifelong learning. In

2000, the German parliament decided that an independent experts commission should be set up; the commission started work in October 2001.

The work of the experts commission is closely linked with the considerations and proposals of the action programme of the EU Commission and the activities of the OECD. The experts commission is to present its final report in late 2003.

Mandate

The experts commission is to deal with basic issues of financing lifelong learning in the Federal Republic of Germany; it started work in October 2001. In keeping with the various life concepts and the requirements of structural change, the experts commission is to develop feasible proposals for new strategies which will lead to a sound overall concept for encouraging greater participation in education. In considering the problem of financing education, the commission has to take into account various system-related aspects, for example tax law, maintenance law and family support. Considerations should include positive experience and examples of good practice from other countries. The commission is to focus on phases of lifelong learning after initial vocational training, including self-directed learning, instead of confining itself to continuing vocational education.

Interim report – the main results

The interim report is a working report and does not contain recommendations. The fields covered by the interim report include the following:

Conclusions of the experts commission:

- Germany is on its way to becoming a knowledge-based society.
- As an export-oriented high-wage country, Germany can face international competition only with quality products.
- Good initial training and continuing learning are the major prerequisites of autonomy and responsibility as the principles of a changed work organization.
- Training for older workers is becoming increasingly important in view of the demographic development.
- Provision of training for migrants can reduce but not eliminate the shortage of skilled workers.

- The changed requirements of the civil society and the technization of everyday life also make lifelong learning a must.
- Structural change can develop in different directions; we will be able to manage change only if we engage in lifelong learning.
- New forms of learning may increase people's interest and pleasure in learning.
- It is desirable that empirical research on the effects of learning be increased.

Participation in continuing education

The main conclusions of the experts commission are as follows:

- Participation in general and vocational continuing education increases in accordance with people's level of school education and initial vocational training, their professional status and career level and with the level of income.
- There are increasingly less differences between male and female participation rates. However, women working in the care sector are clearly underrepresented.
- The opportunities for participation in continuing education are distributed unevenly among regions. When distinguishing between general and vocational continuing education, we note that, in East Germany, participation is above average for continuing vocational education and below average for continuing general education.
- Older people have a clearly lower rate of participation in continuing vocational education than younger people.
- Participation rates stagnate for non-EU foreigners; Turkish men, and particularly Turkish women, have the lowest rates of all non-EU nationals.

The essential features of the financing of continuing education

When outlining the essential features of the financing of continuing education, the experts commission emphasizes the following in particular:

- Continuing education activities always require resources, for example time and money.
- Refinancing processes are lacking transparency. Empirical studies have not been made to show who eventually bears the financial burden after all the shifting.
- Company expenditure on continuing education seems to have been stagnating at a high level since the mid-nineties.
- Financing proportions would shift considerably in favour of individuals and the government, if the value of the leisure time which people spent on learning and the value

of continuing-education-related tax losses at federal and *Land* level were included in the calculations.

- A considerable part of company and individual expenditure on continuing education is refunded by the government.

Incentives and financing options

When considering financing alternatives and possible incentives, the experts commission used a broad definition of resources and financing. It presents a number of basic models (self-financing by individuals, company financing, educational fund/levies, government financing) including mixed types, but it does not yet give any recommendations in its interim report. The mixed types presented by the experts commission include an education account plus vouchers as well as voucher/fund combinations.

The conclusions are summarized as follows:

- The application of incentives and financial means is to encourage the economically efficient use of scarce resources by those who offer and those who demand opportunities for lifelong learning. In this connection, care must be taken to ensure a fairer distribution of participation opportunities.
- Effective incentives and adequate financing instruments, which are to promote greater participation in education, must focus especially on those groups of the population which show a lack of investment in education.
- Other countries have developed new instruments for promoting lifelong learning, which include incentives for more collective responsibility or aim at increasing demand and user orientation (that is, at empowerment).

Future work: scenarios and financing models

The experts commission will discuss suitable financing models in greater detail. This will be the focus of its work in the second part of its deliberations. The commission will base its work on scenarios and their evaluation in accordance with education policy goals and criteria. The methods to be applied are still being discussed by the commission. It has charged the Fraunhofer Institute for Applied Information Technology (FIT) with developing a simulation model, which is to be used to identify for typical model households the transfers relevant to continuing education and to examine the impact of different forms of financing.

It is planned that relevant groups of society participate in the further work of the experts commission. The commission's final report is expected to be available in late 2003.

Example 4: Framework Concept "Innovative Development of Work – The Future of Work"

The framework concept "Innovative Development of Work – The Future of Work", launched by the Federal Ministry of Education and Research in 2001, is a follow-up to the previous programmes entitled "Humanization of Work" and "Work and Technology". It is equipped with about 83 million euro (for the period 2001 to 2005). With its activities, the framework concept supports enterprises and their staff in their efforts to manage structural change in a socially compatible way. The activities focus, for example, on the following areas, in which links between work and learning play a major role:

People-centred work environment in e-business

The question to be dealt with is what impact different forms of e-business have on work and company organization and how work can in this context be designed on a human scale. Practical solutions for changed processes of work and learning will be discussed.

Factors for the establishment and development of corporate cultures and environments that are conducive to innovation

In view of the radical economic and technological change, the challenges of demographic change and the transition to a global science-driven service and information economy, companies today are especially faced with the task of preserving and improving their flexibility and innovative capacity in a way which enables them to develop new products and services. This requires a new corporate culture, which not only allows but also systematically supports innovativeness, creativity and motivation. The envisaged projects are to identify the general conditions and factors required for success and to describe possible options for development. In doing so, they operate at the interface between work and learning.

The impact of demographic change on the future of gainful employment

Demographic trends will be reflected at the corporate level above all by the growing number of older workers. It is therefore necessary to avoid age-specific deficits and employment problems by making education and employment policy focus on people's entire working biographies. The transfer project on the awareness and marketing strategy for demographic change focusses on the question of how workers, companies and associations can become aware of the relationship between ageing and innovation and how they can successfully manage it. We have launched a demography initiative in the area of corporate strategies for a cross-generational employment and personnel policy which takes into account the ageing process. The aim of this initiative is to raise general awareness of the topic of demographic change in the corporate environment and to explain the impact of demographic development on company practice and the necessity of adapting employment and personnel policy so that it is both, conducive to innovation and responsive to the needs of older workers.

Identification and stocktaking of successful changes in job design and company organization

In preparation for the framework concept, past developments were analysed as a basis for the identification of relevant fields of research. In this stocktaking, support was given to the drafting of so-called trend reports. A major finding is that training and skills development are of great importance to the further development and preservation of innovativeness and employability.

Example 5: New Media in Education

The programme entitled "New Media in Education" was presented to the public in March 2000. The programme aims to support the development of teaching and learning software for schools, vocational training and universities. Under this programme, funds totalling more than 300 million euro are available to schools, vocational training and higher education.

From the aspect of lifelong learning, the area of vocational training is of special importance.

Vocational education and training

In the area of vocational education and training, the "New Media in Education" funding programme is part of the Federal Government's measures to create an efficient, modern and viable system of initial and continuing vocational training.

The programme aims to ensure the large-scale introduction of IT-based learning in vocational training. In cooperation with the social partners, fields of application or sectors of industry are selected which are suited for web-based initial and continuing training and which are of special importance to the positive development of employment.

Funding currently focusses on initial and continuing training in the IT sector, particularly on the implementation of new regulations governing continuing IT training. A call for proposals for the development of e-learning software was issued. The need for IT skills and cooperation by the associations have encouraged the definition and implementation of projects. Solutions have been found for such sectors as motor vehicles, textiles and the skilled trades as well as for media occupations and foremen in the metalworking industry. Industry and the skilled trades sector are discussing an integrated solution for *Meister* training.

The lead project on lifelong learning as a basic need (*L³ – Lebenslanges Lernen als Grundbedürfnis*) produced results concerning the use of telelearning in education institutions and the development of suitable content; these results are taken into account by ongoing projects.

Example 6: The social partners as drivers of innovation in lifelong learning

The social partners, too, contribute to innovation in lifelong learning. A few cases in point are mentioned in the following:

Plant agreements

Plant agreements concluded between employers and works councils may include provisions on continuing training arrangements, if collective agreements provide scope for such provisions. A documentation by the Hans Böckler Foundation lists 287 plant agreements for 1999 which include continuing training provisions. Of these agreements, 73 deal exclusively with continuing education and training.

A company which has concluded such a plant agreement for skills development is the Compaq GmbH. On the basis of an agreement of December 1st, 1998, which provides that the relevant collective agreement should also apply to Compaq (*Anerkennungstarifvertrag*), the firm signed an overall plant agreement on continuing training on October 29, 1999.

A distinction is made between job-centred continuing training, that is, the teaching of knowledge and skills required for the job currently done, and person-centred continuing training, which enhances personal qualifications and continuing training in general.

Job-centred continuing training: The goals agreed annually between the staff and their superiors also include qualification goals. The agreed training programmes are offered during working hours. The costs are covered by the Compaq GmbH.

With person-centred continuing training, staff members choose the programmes and ask for their superiors' approval. For participation in continuing training, each staff member has a time account, which is fed by the overtime worked. From the 67th hour, time for training is provided solely by the employer. The costs are covered by the Compaq GmbH.

Collective agreements

Not only statutory provisions but also collective agreements can serve as a basis for financing models and incentives to promote lifelong learning in Germany.

Special mention should in this connection be made of the collective agreement for qualification in the metalworking and electrical industries in the *Land* of Baden-Württemberg, concluded on June 19, 2001; this agreement includes numerous provisions on continuing training.

In company-centred qualification, the employer has to cover all the costs; in the case of staff-centred qualification, staff members have a right to take leave of absence or work part-time. Pursuant to section 2 of the agreement, company-centred continuing training includes the following necessary qualification measures: the constant development of specialized, methodical and social skills required for doing one's job; the updating of skills to enable workers to adapt to changed requirements in their work; and training for a change of career, for doing another or more demanding job.

The main point of the collective agreement is what is provided in its section 3: namely that each worker has a right to agreement with his or her superior on the training programmes required, provided that a need for qualification has been established jointly. Talks have to be held every year to establish the need for training, unless otherwise provided in a plant agreement.

Concluding remarks

It was not possible to give a complete overview of the situation in Germany in this paper. – Though the term 'innovation' is open to interpretation, we all agree that innovation is necessary. Innovation is linked to lifelong learning. And lifelong learning is a prerequisite for a European model of society, as has been outlined in the first chapter of this paper.

Annexes:

Annex 1 Projektliste "Lernende Regionen"

Annex 2 Projektliste "Berufliche Bildung im Programm Neue Medien in der Bildung"