



EUROPEAN COMMISSION  
Directorate-General for Education and Culture

**IMPLEMENTATION OF  
“EDUCATION AND TRAINING 2010”  
WORK PROGRAMME**

**WORKING GROUP B  
“KEY COMPETENCES”**

**ANALYSIS OF THE MAPPING OF KEY COMPETENCY  
FRAMEWORKS  
NOVEMBER 2004**

Contact:  
SÄÄVÄLÄ TAPIO , E-mail: [tapio.saavala@cec.eu.int](mailto:tapio.saavala@cec.eu.int), tel: + 32 2 299 737

## Table of contents

|   |    |
|---|----|
| 1. INTRODUCTION.....  | 3  |
| 2. NATIONAL FRAMEWORKS AND KEY COMPETENCES.....   | 4  |
| 2.1. Mapping key competences .....  | 5  |
| 3. DEVELOPMENTS IN PROGRESS.....  | 5  |
| 3.1. Educational reform in the area of key competences.....   | 5  |
| 3.1.1. Increasing autonomy at local level.....  | 6  |
| 3.1.2. Priority areas for reform .....  | 6  |
| 3.2. Proposed educational reform in the area of key competences .....   | 7  |
| 4. POLICY PRACTICES .....   | 8  |
| 4.1. Developing strategies to meet cross-curricular objectives.....   | 8  |
| 4.1.1. The macro level: policy commitment to cross-curricular approaches .....  | 8  |
| 4.1.2. The role of teacher training .....   | 8  |
| 4.1.3. The micro level: implementation in schools .....   | 9  |
| 4.2. Obstacles to developing cross-curricular approaches .....  | 9  |
| 4.3. Measuring key competences.....   | 9  |
| 4.4. Key competences for adults: what areas are dealt with most effectively? .....  | 10 |
| 4.5. Key competences for adults: areas for future development .....   | 11 |
| 4.6. Summary of main points .....   | 11 |
| <br>  |    |
| Table 1: Mapping of key competences .....   | 13 |
| Table 2: Key competences – overview of the present situation, developments in progress and future challenges .....          | 16 |
| Table 3: Overview on measuring key competences - participation in international studies and national measurement tools..... | 33 |

This analysis was prepared by Dr Anne Pirrie from the Scottish Council for Educational Research, the external consultant engaged by the Commission to support the working group on basic skills, foreign language teaching and entrepreneurship, set up within the framework of the "Education & Training 2010" programme. Tables 2 and 3 have been added by the Commission. This analysis is based on contributions received from members of the working group.

## 1. INTRODUCTION

The new strategic goal for the European Union was set out at the Lisbon European Council on 23 and 24 March 2000. Europe was ‘to become the most competitive and dynamic knowledge-based economy in the world, capable of sustained economic growth with more and better jobs and greater social cohesion.’ In order to attain this goal, the Education Council (i.e. the Ministers of Education of the Member States) adopted a Report on the concrete future objectives of education and training systems.<sup>1</sup> This report sets out an approach to national education policies for the Member States on the basis of three main objectives:

- improving the quality and effectiveness of education and training systems in the EU;
- facilitating access to lifelong learning;
- opening up education and training systems to the wider world.

The Education Council’s report was accepted by the European Council in Stockholm in March 2001. The European Council then asked the Commission and the Education Council to draw up a detailed work programme to reach the three objectives agreed. The work programme was adopted by the Education Council on 14 February 2002, and by the European Council of Barcelona in March 2002.

The work programme contains thirteen specific objectives under the three main ones. The Open Method of Coordination (OMC) is the means by which the Commission coordinates the Member State’s work towards the objectives. The key elements of the OMC are the establishment of benchmarks and indicators, the exchange of good practice and peer review of policy measures.

The Working Group (WG) on Key competences (WG B) is one of eight such groups established to work on the thirteen specific objectives listed under the three main objectives referred to above. It was established in 2001 as part of the detailed Education and Training 2010 work programme. WG B has produced an interim report that details the activities undertaken during the first three phases of its work: the definition of concepts, the identification and analysis of examples of good practice in relation to four key areas<sup>2</sup>; and the presentation of relevant policy conclusions and recommendations for future action in the area of the new basic skills across Europe (ICT; technological culture; foreign languages; entrepreneurship; and social skills).

The next phase of activity began in November 2003. In December 2003, three sub-groups were established in order to refine concepts; develop education and training; and formulate policy recommendations in the following areas: entrepreneurship; the learning needs of less advantaged groups, (including adults with low educational attainments and poor experience of initial education); and the European knowledge framework. During this phase of activity, a questionnaire was distributed to all members of WG B requesting information on the following:

---

<sup>1</sup> <http://register.consilium.eu.int/pdf/en/01/st05/05980en1.pdf>

<sup>2</sup> Adult education; learning to learn; interpersonal and civic competences; and cultural awareness.

- the extent to which key competences were taken account of in national frameworks, or are otherwise taken into account;
- the extent of curricular reform in the area of key competences;
- the nature and extent of cross-curricular working in relation to key competences.

The purpose of the exercise was to provide an overview of the current situation; and to illustrate areas of convergence and diversity in respect of education and training provision in the enlarged European Union in a format that can be updated as required.

This phase of WG B's activity should be viewed in the context of other work undertaken by the European Commission (for example, EC 2000; 2001a; 2001b), and by the Eurydice European Unit, which published a survey of key competences (Eurydice, 2002).<sup>3</sup> The Eurydice report indicates the factors that have led to an increasing interest in competences as an invaluable complement to subject knowledge in a climate in which economic growth and social cohesion are paramount. The factors identified include the enlargement of the EU, an ageing population, increasing migration, increasingly complex career paths, consistently high levels of unemployment and the associated risk of social exclusion. What the Eurydice report makes clear is that 'there is no universal definition of the notion of 'key competence'. However, there is a clear consensus that for a competence to be described as 'key', 'core' or 'basic', it has to make a contribution to the development of human and social capital (see OECD, 2001, World Conference on Education for All, 1990).

## 2. NATIONAL FRAMEWORKS AND KEY COMPETENCES

All of the 26 responses received indicated that national frameworks for key competences had been defined — explicitly or implicitly.<sup>4</sup> For example, in the case of Austria, there was no general framework, but there were (mostly implicit) references to key competences in the ISCED 2 curricular guidelines. Similarly, the Icelandic National Curriculum Guide does not define key competences explicitly, but the emphasis and clearly-defined objectives correspond to the definitions proposed by WG B. Overall, the evidence underlines the findings of the Eurydice survey, namely, that 'curricula have ... come to focus more on the successful application of knowledge and skills rather than on their transmission', and that as a consequence, 'most education authorities have redefined their educational aims in terms of competences'.

The evidence suggests the notion of key competences has gained wide acceptance, and that these are increasingly embedded in national curricula across Europe. For example, the White Paper that launched the curricular reforms currently underway in the Czech Republic highlighted the role of key competences in 'transforming the encyclopaedic conception of education.'<sup>5</sup> This is also a priority in other new Member States, such as

---

<sup>3</sup> The most significant development outside Europe is the Education for All movement, launched by UNESCO in 1990. This promoted a holistic view of education consisting of four 'pillars': learning to know, learning to do, learning to be and learning to live together. See [www.unesco.org/education/efa/index.shtml](http://www.unesco.org/education/efa/index.shtml) for further details.

<sup>4</sup> Completed questionnaires were received from the following countries: Austria, Flemish-speaking community in Belgium, French-speaking community in Belgium, Cyprus, Czech Republic, Germany, Greece, Spain, Finland, France, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, the Netherlands, Norway, Poland, Portugal, Romania, Slovenia, Sweden and the UK.

<sup>5</sup> National Programme for the Development of Education in the Czech Republic, 2000.

Hungary and Lithuania, and in Romania. In the latter case, the new curriculum framework currently being adopted puts forward the eight domains of key competences established by WG B and explains their use in the development of curricular frameworks for different types of schools. In the French-speaking community in Belgium, competence-based teaching approaches are currently being developed. In the case of France, the situation is still largely as described in the Eurydice survey:

‘The official curricula drawn up by the Ministry of Education specify the competences that should be developed during compulsory schooling. These competences fall into two groups, namely general competences and subject-specific competences, all of which are defined in relation to the priority competence ‘proficiency in language skills.’

To sum up, the prevalent use of the term ‘framework curricula’ suggests that here is now a general emphasis on skills and attitudes as well as subject-based knowledge in European school curricula. The following response provides a clear illustration of this phenomenon:

‘the notion is...that students do not merely acquire concrete knowledge in a specific field of study, but also the tools to cope with both the familiar and the unfamiliar.’ (9)

## **2.1. Mapping key competences**

None of the frameworks presented was a precise match for the one defined by WG B. However, there was a large measure of overlap (see Table 1). There was considerable overlap with the five domains of ‘cross-curricular’ key competence identified by WG B, namely ICT; learning-to-learn; interpersonal and civic competences; entrepreneurship; cultural awareness, although these were often described in different terms. For example, interpersonal and civic competences encompass ‘personal growth’ and ‘participatory citizenship’ (Finland); ‘life skills’ (Iceland); ‘dynamic capabilities’ (*dynamische Fähigkeiten*) (Austria); ‘education for citizenship’ (Flemish-speaking community in Belgium); and ‘key qualifications’ (Austria) for the world of work: punctuality, politeness, accuracy, team work, etc. Furthermore, in the course of the analysis it became more evident that there is a large measure of overlap between the knowledge, skills and attitudes detailed under the headings ‘learning-to-learn’ and ‘entrepreneurship’ (see pages 54 and 57, Annex 2 of the WG B’s Report of November 2003.)

## **3. DEVELOPMENTS IN PROGRESS**

### **3.1. Educational reform in the area of key competences**

The Eurydice survey noted that it is only comparatively recently that education systems have begun to make explicit reference to the concept of key competences in curricula for general compulsory education. The Eurydice survey reported examples in only four education systems: the French-speaking community in Belgium; England and Wales; Scotland; and Portugal (Eurydice, 2002, pp 31-32). The evidence from the questionnaire returns suggests that there has been substantial progress across Europe in the area of curricular reform in respect of key competences. The nature of this is summarised below:

- far-reaching curricular reform aimed at raising the profile of key competences in all curricular levels (for example, in Romania, the Czech Republic, Hungary and Ireland — and at upper secondary level in Austria, where the concept of ‘dynamic capabilities’ (*dynamische Fähigkeiten*) is further elaborated, with greater emphasis on the competences necessary for successful participation in

tertiary education, e.g. self-regulated learning; ICT and teamwork, presentation skills, etc.);

- the development of new framework curricula in respect of knowledge and skills (Finland);
- using benchmarks and indicators to monitor standards, including those relating to key competences (Germany and Malta);
- the piloting of new standards for reading, mathematics and foreign languages (FL1) (Austria); and for Greek, mathematics and physics (Cyprus); and the development of a detailed set of attainment targets in the Netherlands.

In the Netherlands, there are currently over 250 attainment targets that are compulsory for all pupils aged 12 to 15. These comprise subject-specific goals and general goals (for example, ‘the pupil is able to formulate his opinion based on sound arguments’). From the 2006/2007 school year onwards, a smaller (58) and much less detailed framework of attainment targets will give direction to secondary education, acknowledging the authority of schools and teachers. In Germany, the lever for educational reform was the establishment in 2004 of a National Institute for Quality Development in the school system. The main task of the Institute is to set and monitor educational standards, including those relating to key competences, and to develop and introduce appropriate quality assurance procedures.

### *3.1.1. Increasing autonomy at local level*

In the case of the Czech Republic (and indeed in Austria, Sweden, Hungary and the Netherlands), the priority is to provide for greater autonomy at local level. In Austrian lower secondary schools, individual teachers and schools have considerable discretion in how they complement the core curriculum, which only stipulates the content of two thirds of the teaching time. In the Czech Republic, new framework educational programmes are currently being piloted, and schools will have up to two years to develop their own programmes. In Luxembourg, the concept of key competences, and the activities of WG B are considered to have had a considerable impact on the development of a new framework for pre-school education. They are also perceived to have influenced the development of the primary school curriculum and new teaching materials; and to have provided the impetus for a reform of teacher training. In Finland, the National Board of Education has confirmed new framework curricula for both compulsory and upper secondary education. Here too it is left to the municipalities to draw up educational programmes that broadly correspond to the national framework but are tailored to meet local needs. A key feature of the process of reform in Finland is the involvement of stakeholders (e.g. headteachers and teachers) in the curriculum development process. It is also worth noting that student welfare and home-school links have for the first time been included in the framework curricula in Finland.

### *3.1.2. Priority areas for reform*

In the Flemish-speaking community in Belgium, the current focus is on ICT. Curricular objectives are currently being revised to take account of the increasing importance of ICT skills. It is anticipated that entrepreneurship will also be included in the final objectives. Reforms aimed at modularising adult basic and second-chance education are also underway. In the French-speaking community in Belgium, the emphasis is on: the use of diagnostic tests — a pilot project is currently underway; the development of

competence-based teaching approaches; the adoption of a strategic plan for the development of ICT; and raising standards of literacy and numeracy in the adult population. In Iceland, curricular reform is focused on the area of life skills (a discrete subject area within Icelandic school curricula) and on ICT. In Latvia, the current focus is on the introduction of bilingual education in order to address the needs of speakers of minority languages; in Norway, on the possible introduction of a second foreign language at lower secondary level; in Slovenia on vocational education and training (VET); and in the UK on the development of ICT as an additional basic skill under Skills for Life umbrella. Education for citizenship has been part of the statutory curriculum for secondary schools in England since 2002. A national framework for the teaching of personal, social and health education has also been created, and a new initiative has recently been launched aiming to offer children as young as seven the opportunity to learn Spanish and German. In Hungary there are three priority areas: ICT, foreign languages and the introduction into primary schools of locally-developed curricula derived from a competence-based core curriculum.

### **3.2. Proposed educational reform in the area of key competences**

The data on planned educational reform were relatively sparse. This can largely be explained by the fact that many of the reforms described above were being implemented over an extended period of time. Another possible explanation is the extent to which education systems throughout Europe have integrated the development of key competences into their curricula for general compulsory education.

Some of the planned reforms were in response to specific national developments, in addition to the broader challenges facing all European countries. For example, in Iceland, the proposed restructuring of upper secondary education and the possibility that this phase will be reduced from 4 years to 3 years has implications for the further development of competence-based approaches, particularly in respect of setting objectives. In Latvia, there are plans to increase the profile of the natural sciences and ICT in the curriculum — the latter applies also to Norway — and to introduce social studies as a discrete subject.

The Lithuanian response confirms a tendency observed in the responses of some of the new Member States to Questions 1 and 2, namely that core curricula in these countries are being substantially revised in anticipation of full membership of the EU, with a view to competing more effectively in a broader European market. The Lithuanian response stated that the goals and attainment targets of the future framework curriculum will be identified in terms of the key competences defined by WG B. However, it is important to point out that substantial curriculum reform is also taking place elsewhere.<sup>6</sup> In Poland, the profile of education for entrepreneurship is being raised with this aim in mind. In Romania, the Ministry is organising a series of conferences specifically designed to raise awareness of the Lisbon process as a whole. In Slovenia and Hungary, the focus for

---

<sup>6</sup> For example, the rationale for the implementation of educational reforms in Sweden (from 2007) is to better prepare students leaving upper secondary education for the challenges of working life; to increase the number of students progressing to higher education; to widen access – priorities, incidentally, also in Slovenia – and to enhance the status of VET. In the UK, the Tomlinson Report which is currently out for consultation aims to improve the knowledge and skills of young people to cope with changing demands. The recommendations include a compulsory core of learning in key competences such as communication, mathematical skills, ICT and some wider activities. The overarching aim of the proposed reforms is to provide a more coherent educational experience for all young people through the development of a united framework of diplomas.

future reform is on the balance between skills for employability and the broader range of personal and civic competences. The assessment and certification of key competences was a future priority in both Hungary and Italy. Finally, the Austrian response reported a broad-ranging discussion on educational futures. *Klasse: Zukunft* is an initiative for promoting development and raising quality in Austrian schools. Interested parties can contribute ideas via the virtual platform [www.klassezukunft.at](http://www.klassezukunft.at). Education for entrepreneurship is also a particular focus in Austrian upper secondary schools.

## **4. POLICY PRACTICES**

### **4.1. Developing strategies to meet cross-curricular objectives**

#### *4.1.1. The macro level: policy commitment to cross-curricular approaches*

In several cases, there was explicit commitment at policy level to developing cross-curricular approaches. Examples of this include the development of curricular guidelines, as in Austria, Romania, ‘educational pathways’, as in Poland, or the core curriculum as in Norway. The project-based, thematic approach adopted in Norway (and to some extent in Slovenia) was perceived to have resulted in an increase in team-teaching. Teamwork in planning goals and instructional activities, projects and problem-solving activities was perceived to facilitate cross-curricular approaches.

The Swedish case was described as ‘management by objectives’, in that ‘the national curricula are not formulated in terms of subjects, but focus on overarching goals that teaching and teachers are to strive for.’ This broadly describes the situation in Spain, the Netherlands and in the Czech Republic, where schools are encouraged to design their own programmes to meet national objectives, and in Spain. In Malta, school development planning is the main means by which schools and training institutions are encouraged to develop strategies to meet cross-curricular objectives. In the Flemish-speaking community in Belgium, cooperation with external partners is regarded as a means of facilitating a cross-curricular approach, and the fact that the inspectorate assessed the development of cross-curricular approaches was also perceived to facilitate their development. In Hungary, the cross-curricular approach is also a key feature of the core curriculum.

#### *4.1.2. The role of teacher training*

Teacher training and the development of appropriate support materials was reported to play a significant role in several countries: Cyprus, Germany, Spain, Hungary, Finland, Greece, Lithuania, Malta and Slovenia. This was considered necessary in order to counter the subject-oriented approach that was widely perceived as a barrier to developing cross-curricular activities and a competence-based rather than a subject-based approach to education and training at all levels. The National Board of Education in Finland organises in-service training in the area of basic skills. In Cyprus too, the main mechanism at present is the introduction of a course on multicultural awareness as part of the teacher training programme. The results of Germany’s involvement in the problem-solving aspect of PISA 2000 are now being considered in initial teacher training and in continuing professional development for teachers.

#### 4.1.3. *The micro level: implementation in schools*

At the micro-level, the Maltese response indicated that extra-curricular activities, where subject barriers and compartmentalisation can be avoided, were a valuable mechanism for achieving cross-curricular objectives. As was evident from the first study visit undertaken by WG B (November 2003), the Icelandic approach has been to develop 'life skills' as a discrete subject in the curricula of primary, lower and upper secondary schools. In contrast, in Italy there is a strong tradition of cross-curricular approaches, especially in respect of developing social and interpersonal competences. This is reflected in time allocated for joint planning between teachers. Team work in planning goals and instructional activities is also very much part of the Slovenian approach. In the Netherlands, programmes are being established to provide support to schools in devising new ways of delivering the curriculum. The responses from Latvia and Malta indicated that one way of addressing the widespread phenomenon of curriculum overload was to increase the amount of cross-curricular activity in schools.

#### 4.2. **Obstacles to developing cross-curricular approaches**

The main obstacles to the development of cross-curricular approaches were mentioned in the responses from more than one country. These are listed below, in descending order of significance.

- teacher education is largely subject-based. Furthermore, there is a strong tradition of teaching within subject boundaries and little experience of/time for joint planning; and/or lack of interdisciplinary teaching materials (Austria, Spain, Hungary, Ireland, Iceland, Italy, Latvia, Malta, the Netherlands, Norway, Poland, Portugal, Romania, Sweden, Slovenia, UK). ('Cross-curricular approaches require ... a level of co-ordination that transcends traditional classroom divisions' (Norway);
- 'innovation fatigue' (Belgium (French-speaking), Lithuania, Malta); some resistance on the part of teachers (Malta, Poland); and parents (Portugal, Sweden);
- teacher training is lagging behind policy developments (Iceland, Portugal, Romania);
- lack of flexibility in school timetables (Austria, Norway); for flexible pathways (Poland); 'the approach to curriculum planning is still prevalently based on the division between scientific disciplines reflected in subjects taught at various levels.' (Slovenia);
- degree of autonomy at school level can mean that there are considerable variations in practice (Belgium (French-speaking), Czech Republic);
- lack of leadership/commitment to the principle of a cross-curricular approach at school level (Romania, Slovenia);
- lack of a clear definition of 'cross-curricular competences'; and lack of a coherent system of assessment of cross-curricular competences (Italy).

#### 4.3. **Measuring key competences**

The evidence suggests that there are currently few systematic tools in use for measuring the acquisition of key competences. Several countries made reference to participation in international assessment programmes:

- Programme for International Student Assessment (PISA) (Austria, Czech Republic, Germany, Romania, Lithuania (from 2006), Hungary);

- Trends in Mathematics and Science Study (TIMSS) (Austria, Czech Republic, Romania, Hungary);
- Progress in International Reading Survey (PIRLS) (Germany, Romania, Hungary)<sup>7</sup>

There were also references to participation in the International Adult Literacy Survey (IALS) (e.g. the UK). There were no reported incidences of available time-series data.

Sixteen of the 25 responses received to date indicated that there was some form of national testing operating in their country.<sup>8</sup> Once again, the emphasis was on the assessment of the ‘traditional’ basic skills, such as literacy and numeracy. However, specific reference was made to assessing students’ capacity to acquire and process information (in the Flemish-speaking community in Belgium from 2004); the assessment of foreign language competence (Norway, Sweden); and to the national framework for assessing learning to learn (Finland). The response from Hungary stated that ‘tests are not designed to measure whether pupils meet the subject-based requirements, but to assess their ability to activate knowledge and to handle real problems and situations’. In the case of Sweden, national assessments on attitudes among pupils, teachers and parents are carried out every three years. These measure aspects such as learning to learn.

There were references to observation techniques and pupil self-evaluation (Greece and Portugal); to the presentation of portfolios to external assessors in the areas of further education (Ireland); and to descriptive assessment (or pupil profiling) in the first stage of basic education (Slovenia). This was considered to have contributed to a better understanding of the connection between setting objectives, the choice of teaching techniques and activities and the assessment of attainment.

However, the evidence supports the conclusion reached in the Eurydice survey, namely that ‘the assessment of educational outcomes at the end of compulsory education is [mainly] concerned with the measuring the extent to which pupils have assimilated the educational provision in schools.’ It is also still the case that ‘all countries stress the role of assessment as a tool for monitoring the individual progress of pupils and guiding their development’ (Eurydice, 2002, p. 38). This confirms the general shift from measuring knowledge towards assessing performance and transferable skills.

#### **4.4. Key competences for adults: what areas are dealt with most effectively?**

The responses to this question tended to focus more on the rationale for the development of adult education (i.e. education for employability and social inclusion with a focus on the needs of disadvantaged groups who have missed out on various stages of compulsory education) and on appropriate modes of delivery (e.g. distance learning; twilight and weekend provision to meet local demand; accreditation of prior learning; and recognition of informal and non-formal competences) than on the areas of competence dealt with most effectively.

---

<sup>7</sup> See Eurydice (2002) *Key Competences. A developing concept in general compulsory education*. Brussels: Eurydice European Unit, pp. 26-27 for details of involvement of EU Member States in large-scale international studies on educational attainment since 1960.

<sup>8</sup> The countries/areas concerned were BE (Fl); BE (Fr); CZ; ESP; HU; IE; LA; LT; LUX; NO; PL; PT; RO; SE; SI.

There was, however, a strong consensus on what these areas were. They are listed below in descending order of importance — as determined by the number of responses that referred to these areas:

- ICT (Austria, Belgium (French-speaking), Belgium (Flemish-speaking), Czech Republic, Iceland, Lithuania, Poland, Portugal, Romania UK);
- adult literacy and numeracy (Belgium (French-speaking), Ireland, Norway, Portugal, Slovenia UK);
- foreign languages (Austria, Czech Republic, Lithuania, Luxembourg, Romania);
- language of host country for non-native speakers (Belgium (French-speaking) Portugal, UK);
- communication in the mother tongue (Portugal, Slovenia, UK).

#### **4.5. Key competences for adults: areas for future development**

The responses indicated a number of areas where further progress was considered necessary. There was some concern expressed about progress made in adult education. Increasing participation in education and training amongst disadvantaged groups was considered a priority in several countries (Czech Republic, Ireland, Poland, Slovenia), as was increasing certification amongst disadvantaged adults (Iceland) and reducing early school leaving (French-speaking community in Belgium). Two responses (Czech Republic, Romania) expressed concern about the lack of a coherent strategy for lifelong learning, and the Polish response identified the need for flexible learner-centred provision. The Slovenian response identified a need for an in-depth analysis of the educational needs of socially and economically disadvantaged groups; and for further research into assessment methodologies for adults with poor basic skills. In respect of particular key competences, learning to learn was seen as an area for further development in several countries (Austria, Lithuania, Malta, Portugal, Romania). There was considered to be scope for further development of adult literacy and numeracy in Austria, Norway and the UK. Similarly, ICT continued to be an area in which further development was needed in several countries, e.g. Cyprus, Spain and Portugal, where lack of adequate infrastructure was also a problem. Other specific areas mentioned in the responses were: entrepreneurship (Spain, Lithuania, Malta, Portugal, Romania); interpersonal and civic competences (Austria, Czech Republic, Romania); cultural awareness (Czech Republic, Portugal); and foreign languages (Spain, Czech Republic, Poland).

#### **4.6. Summary of main points**

- All of the responses reviewed indicated that national frameworks for key competences had been defined — explicitly or implicitly.
- The evidence suggests that key competences are now being incorporated in national curricula across Europe.
- There was considerable overlap with the domains identified by WG B, although the key competences were often described in different terms.
- The evidence suggests that there is substantial activity across Europe in the area of curricular reform: this varies in scale from far-reaching curricular reform (as in

Romania, the Czech Republic, Hungary and Ireland) to initiatives with more specific targets.

- Across Europe, there was evidence of a perceived need to better prepare students for the challenges of working life in a rapidly developing European economy.
- Broadly speaking, the subject-based nature of teaching was perceived as an obstacle to developing the cross-curricular approaches that were believed to fulfil the above goal.
- The evidence suggests that there are currently few systematic tools in use for measuring the acquisition of key competences.
- There is, however, widespread national testing in literacy and numeracy, and on a more limited scale in the areas of science and foreign language acquisition.
- In respect of key competences for adults, the focus was on literacy and numeracy, ICT and foreign languages.

## **References**

European Commission (DG EAC) (2000) *A Memorandum on Lifelong Learning*. Commission Staff Working Paper, SEC (2000).

European Commission (DG EAC, DG for Employment and Social Affairs) (2001a) *Making a European Area of Lifelong Learning a Reality*.

European Commission (DG EAC) (2001b) Report from the Commission. The concrete future objectives of education and training systems (COM (2001) 59 Final).

Eurydice (2002) *Key Competences. A developing concept in general compulsory education*. Brussels: Eurydice European Unit.

OECD (2001) *Defining and Selecting Key Competences*. Paris: OECD.

World Conference on Education for All (1990) *World Declaration on Education for All and Framework for Action to Meet Basic Learning Needs*. New York: WCEFA.

**4.7. Table 1: Mapping of key competences**

| Country                        | L1        | FL        | MST        | 5. ICT           | L-to-L          | Soc/int        | Ent.                                 | C. awareness                                    |
|--------------------------------|-----------|-----------|------------|------------------|-----------------|----------------|--------------------------------------|---|
| Belgium (Fl)                   | ✓         | ✓         | ✓          | ✓                | ✓               | ✓              | ✓                                    | Expressive/creative education                   |
| Belgium (Fr)                   | ✓         | ✓         | ✓          |                  | ✓               | ✓              |                                      | <i>'la transmission de l'heritage culturel'</i> |
| Belgium (DE)                   | No data   | No data   | No data    | No data          | No data         | No data        | No data                              | No data   |
| Česká republika (CZ)           | ✓         | ✓         | ✓          | (part of L-to-L) | ✓               | ✓              | (part of problem solving and civics) | Included in Art education                       |
| Danmark (DK)                   | No data   | No data   | No data    | No data          | No data         | No data        | No data                              | No data   |
| Deutschland (DE)               | ✓         | ✓         | ✓          |                  | ✓               | ✓              |                                      | No data   |
| Eesti (EST)                    | No data   | No data   | No data    | No data          | No data         | No data        | No data                              | No data   |
| Espana (ES)                    | ✓         | ✓         | ✓          | ✓                | ✓               | ✓              | ✓                                    | Art/music                                       |
| France (F) <sup>1</sup>        | ✓         | ✓         | ✓          | ✓                | ✓               | ✓              |                                      | Artistic education                              |
| Hellas/Greece (GR)             | ✓         | ✓         | ✓          | ✓                | ✓               | ✓              |                                      | ✓   |
| Ireland (IE)                   | ✓         | ✓         | ✓          | ✓                | ✓               | ✓              |                                      | ✓   |
| Italia/Italy (I)               | ✓         | ✓         | ✓          |                  | <sup>2</sup>    | ✓              | <sup>2</sup>                         | Art/music                                       |
| Kypros (CY) <sup>3</sup>       | ✓         | ✓         | ✓          | ✓                |                 |                |                                      |   |
| Latvija (LA)                   | ✓         | ✓         | ✓          | ✓                |                 | ✓              |                                      | Creativity and self-expression                  |
| Lietuva (LT)                   | ✓         | ✓         | ✓          | ✓                | ✓               | ✓              | ✓                                    | Art/creativity                                  |
| Luxembourg (L) <sup>4</sup>    | ✓         | ✓         | ✓          | ✓                | ✓               | ✓              |                                      | ✓   |
| Magyarország (HU) <sup>5</sup> | ✓         | ✓         | ✓          | ✓                | ✓ <sup>6</sup>  | ✓              |                                      |   |
| Malta (MA) <sup>7</sup>        | ✓         | ✓         | ✓          | ✓                | ✓               | ✓              | <sup>8</sup>                         |   |
| Nederland (NL)                 | ✓         | ✓         | ✓          | ✓                | ✓ <sup>9</sup>  | ✓              | ✓                                    | ✓ <sup>10</sup>                                 |
| Österreich (AT)                | ✓         | ✓         | ✓          | ✓                |                 | ✓              |                                      | Art/music                                       |
| Polska (PL) <sup>11</sup>      | ✓         | ✓         | ✓          | ✓                |                 | ✓              | ✓                                    | Art and music (cultural capital)                |
| Portugal (PT) <sup>12</sup>    | ✓         | ✓         | ✓          | ✓                | ✓               | ✓              | ✓                                    | ✓   |
| Slovenija (SI) <sup>13</sup>   | ✓         | ✓         | ✓          | ✓                | ✓ <sup>14</sup> | ✓              | ✓ <sup>15</sup>                      | ✓   |
| Slovenská Republika (SK)       | No data   | No data   | No data    | No data          | No data         | No data        | No data                              | No data   |
| <b>Country</b>                 | <b>L1</b> | <b>FL</b> | <b>MST</b> | <b>ICT</b>       | <b>L-to-L</b>   | <b>Soc/int</b> | <b>Ent.</b>                          | <b>C. awareness</b>                             |
| Suomi (FI) <sup>16</sup>       | ✓         | ✓         | ✓          | ✓                | ✓               | ✓              | ✓                                    | ✓   |
| Sverige (SE) <sup>17</sup>     | ✓         | ✓         | ✓          | ✓                | ✓ <sup>18</sup> | ✓              |                                      | ✓ <sup>19</sup>                                 |
| United Kingdom (UK)            | ✓         | ✓         | ✓          | ✓                | ✓               | ✓              | ✓                                    | ✓   |

|                            |         |         |         |         |                 |         |         |         |
|----------------------------|---------|---------|---------|---------|-----------------|---------|---------|---------|
| Iceland (IS) <sup>21</sup> | ✓       | ✓       | ✓       |         | ✓ <sup>22</sup> | ✓       | ✓       | ✓       |
| Norge (NO) <sup>23</sup>   | ✓       | ✓       | ✓       | ✓       | ✓               | ✓       | ✓       | ✓       |
| Bulgaria (BG)              | No data | No data | No data | No data | No data         | No data | No data | No data |
| Romania (RO) <sup>24</sup> | ✓       | ✓       | ✓       | ✓       | ✓               | ✓       | ✓       | ✓       |
| Turkey (TU)                | No data | No data | No data | No data | No data         | No data | No data | No data |

<sup>1</sup> The official curricula drawn up by the Ministry of Education specify the competences that should be developed during compulsory schooling. These are particularly in evidence in the new primary curriculum that was introduced in 2002. These competences fall into two groups, namely general competences (which relate particularly to oral and written communication) and subject-specific competences (which include civic education and artistic education).

<sup>2</sup> ‘The so-called new competences (problem-solving, learning-to-learn and entrepreneurship) have been at the centre of the recent debate on education and Italy is keenly aware of their importance, as the draft Law makes clear.’ Eurydice, 2002, p. 107.

<sup>3</sup> Cyprus has not yet defined any framework for key competences, although some are embedded in the curriculum.

<sup>4</sup> ‘Le concept des compétences-clé a largement influencé l’élaboration des nouveaux livrets scolaires de l’enseignement primaire (bulletins) (1<sup>e</sup> à 6<sup>e</sup> années d’études)’ parus en 2003.

<sup>5</sup> Six domains of key competence are set out in the National Development Plan: literacy; mathematical and logical skills; ICT; social, life management and environmental competences; foreign languages skills.

<sup>6</sup> The following competences — which can be broadly categorised under ‘learning-to-learn’ — are identified in the strategy of the development of public education: learning techniques, intelligent learning, applying knowledge and instrumental competences.

<sup>7</sup> ‘The key competences are contained in our National Minimum Curriculum (NMC) which was established in 1999.’

<sup>8</sup> ‘Entrepreneurship is not mentioned as such, but could be implicitly deduced from the various methodologies suggested throughout the whole document.’ However, *‘entrepreneurship as such should be more explicitly mentioned.’*

<sup>9</sup> ‘Pupils should learn to acquire knowledge and skills, making use of ICT where appropriate. To this end, they should learn (amongst other things) certain strategies for improving the learning process. The strategies in question are:

- Assessing information on the grounds of reliability, representativeness and usefulness, as well as the processing and use of information;
- Using strategies for the acquisition of additional knowledge and skills, including memorisation, note-taking, schematisation and the identification of associations with existing knowledge;
- Using strategies for the comprehension of written and spoken information;
- Making choices on a considered basis;
- Investigating a simple technical, scientific or social question systematically;
- Expressing personal experiences and carrying out instructions from other people, using words, sounds, images and movements;
- Developing a personal opinion by means of reasoned argument.’ (Eurydice, 2002, p. 118)

Incidentally, this quotation also illustrates the inextricable link between knowledge and skills, and the fact that ICT is a tool for the achievement of a wide range of educational ends, rather than an end in itself.

<sup>10</sup> See under ‘Cross-disciplinary themes’. ‘Explicit attention should be given to ... the achievements and possibilities of art and culture, including the media.’ (Eurydice, 2002, pp. 117-118.

<sup>11</sup> Key competences were defined in the Regulation of the Minister of Education and Sport of 26 February 2002.

<sup>12</sup> The national curriculum adopted in 2002/03 is focused on key competences. The curriculum guidelines introduced in 2002 (Decree-Law No 6/2001) are rooted in the principle of promoting the development of key competences. See [www.deb.min-edu.pt](http://www.deb.min-edu.pt). The legal framework for the current curriculum for upper secondary education is the Fundamental Law on Education 46/86 and the Decree-Law 286/89. Hence the curricular organisation was not defined on the basis of the development of key competences. The competences to be developed by pupils in upper-secondary post-compulsory education were somehow explicit in the objectives.

- <sup>13</sup> Although there is no national framework, a number of strategic goals (see The White Paper on Education (1996); Guidelines for the Renewal of the System of Education and Training (1996); and Guidelines for the Reform of VET (2001) are to a large extent comparable to the eight fields of key competences defined by WGB.
- <sup>14</sup> e.g. '(in respect of general upper secondary education) 'developing independent critical judgement and responsible behaviour.'
- <sup>15</sup> 'Entrepreneurship has been explored as a principle and approach to teaching various subjects in secondary school (both general and vocational). In secondary economic education [sic] it is a cross-curricular activity enabling students to develop practical skills needed for work in a business.'
- <sup>16</sup> New national curriculum frameworks have been developed for comprehensive [compulsory] and upper secondary education. Considerable emphasis is placed on 'thematic entities', i.e. operating principles that help define the operating culture of schools. The thematic entities related to the key competences identified by WGB are as follows: personal growth, cultural identity and internationalisation, participatory citizenship and entrepreneurship.
- <sup>17</sup> The eight key competences are not defined in any special framework in Sweden, but permeate the national curricula and the whole Swedish education system.
- <sup>18</sup> 'Pupils will learn to carry out research, learn and work independently and together with others.'
- <sup>19</sup> 'Pupils will develop their ability to express themselves creatively and become more interested in participating in the range of cultural activities that society has to offer.'
- <sup>20</sup> The UK government has defined a framework for key competences, but it is not fully congruent with the one defined by WGB. The key skills framework comprises six discrete skills: communication, application of number, ICT, working with others, improving one's own learning and problem solving.
- <sup>21</sup> The National Curriculum Guide (for all subject areas in compulsory and upper secondary schools) does not define key competences explicitly, but the emphasis and clearly-defined objectives correspond to the definitions of key competences established by WGB.
- <sup>22</sup> The Life Skills Programme (the object of the first study visit undertaken by WGB) encompasses learning-to-learn, interpersonal and social skills and entrepreneurship.
- <sup>23</sup> Norway has a core curriculum for primary, secondary and adult education which covers all the key competences, including entrepreneurship. The latter is construed in terms of personal and social responsibility.
- <sup>24</sup> A new curriculum framework (*plan-cadru de invatamant*) for pupils aged 14-16 will come into force in the 2004-2005 school year. This curriculum framework draws upon the key competences decided at European level. Appendix 1 of the Ministerial Order No 5723/23.12.2003, which approves the new curriculum framework for Grades IX and X, sets out the eight domains of key competences established by WGB and explains their use in the development of curricular frameworks for the individual types of schools.

**Table 2: Key competences – overview of the present situation, developments in progress and future challenges with regard to the framework developed by working group B on key competences within the context of the “Education and Training 2010” work programme**

|                | <b><i>Key competences in national frameworks – present situation</i></b>  | <b><i>Developments in progress and future challenges</i></b>   |
|----------------|---|--|
| <b>Austria</b> | <ul style="list-style-type: none"> <li>▪ <i>In lower secondary education (“Lehrplan 99”, ISCED 2) the curriculum comprises three areas: subject-related competences, social competences and self-competences. The latter two place emphasis on self-esteem, responsibility, initiative-taking etc. i.e. real-life situations</i></li> <li>▪ <i>Curricula reflect the shared responsibility of all subjects for developing cross-curricular objectives</i></li> <li>▪ <i>“Schlüsselqualifikationen” in pre-vocational education to stress across-the-board skills such as flexibility, accuracy, personal development; stress on students’ autonomy in upper secondary education.</i></li> <li>▪ <i>Higher general upper secondary (Gymnasium, ISCED 3) curriculum recently reformed: one third of the teaching time decided at the school level, syllabuses based on competences rather than knowledge. Student’s autonomy stressed in order to prepare them for tertiary education requirements;</i></li> <li>▪ <i>In vocational upper secondary education, cognitive competences and practical competences are specifically dealt with (<a href="http://www.berufsbildendeschulen.at">www.berufsbildendeschulen.at</a>);</i></li> <li>▪ <i>Foreign languages and ICT dominate adult education provision (<a href="http://www.erwachsenenbildung.at">www.erwachsenenbildung.at</a>)</i></li> </ul> | <ul style="list-style-type: none"> <li>▪ <i>Standards developed and piloted for reading, maths, first foreign language, with an emphasis on cross-curricular competences such as critical thinking, self-regulated learning etc</i></li> <li>▪ <i>Schools are encouraged, but not obliged, to formulate their own school program on the basis of the national curriculum;</i></li> <li>▪ <i>“Future Commission” established to analyse the future needs of Austrian education system and make recommendations for future developments – public discussion(see <a href="http://www.klassezukunft.at">www.klassezukunft.at</a>)</i></li> <li>▪ <i>In vocational upper secondary education, learning to learn and interpersonal skills would need more attention in the future</i></li> <li>▪ <i>Programmes are needed for basic skills for adults with literacy and numeracy difficulties; the development of broader competences are to be evaluated since adult education is not regulated by federal curricula</i></li> <li>▪ <i>Subject-based teaching and the traditional distribution of working hours is seen as a challenge in dealing with cross-curricular objectives</i></li> </ul> |

|                                    | <b>Key competences in national frameworks – present situation</b>  | <b>Developments in progress and future challenges</b>   |
|------------------------------------|--|---|
| <b>Belgium (Flemish Community)</b> | <ul style="list-style-type: none"> <li>▪ The definition of competences follows those of DeSeCo and WGB</li> <li>▪ Final objectives (learning to learn, social skills, citizenship education, health education, environment education, expressive-creative education and technical-technological objectives are defined and applied at different levels of education</li> <li>▪ Schools are obliged to deal with cross-curricular objectives and the present competence requirements on teachers refer to working with cross-curricular objectives. The inspectorate uses an instrument to screen the efforts schools are making in this area. Moreover, networks and platforms have been developed to support schools in dealing with technological literacy challenges</li> </ul> | <ul style="list-style-type: none"> <li>▪ Final objectives are being revised in order to incorporate <u>ICT</u> competences</li> <li>▪ Final objectives for <u>entrepreneurship</u> will be included</li> <li>▪ A decree <u>on language learning</u> in Kindergarten and primary education is being debated in the Parliament</li> <li>▪ Modularisation of <u>adult basic education</u> and second chance is underway</li> </ul>   |
| <b>Belgium (French Community)</b>  | <p>Three concepts are used within compulsory education:</p> <ul style="list-style-type: none"> <li>• <i>Socles de compétences</i> (ISCED 2) ;</li> <li>• <i>Compétences terminales</i> (ISCED 3);</li> <li>• <i>Compétences et savoirs communs</i>.</li> </ul> <ul style="list-style-type: none"> <li>• The definition of “competence” in the decree that regulates education corresponds to the definition of WGB. “<i>Socles de competence</i>” define the know-what, know-how and attitudes in the 8th years of compulsory schooling while “<i>compétences terminales</i>” refer to the end of upper secondary education.</li> </ul>  | <ul style="list-style-type: none"> <li>• The adoption of the decree (1997) has led to an education provision that is based on competences. A commission was established to steer the process and ensure equality and quality of education. A strategy has been adopted to increase the use of ICT in schools. Moreover, it has been considered essential to provide schools with a set of tests to verify the level of competences acquired.</li> <li>• In adult education, the focus is on basic skills (reading and writing) and a major project involving NGOs is underway (“<i>Lire et écrire</i>”).</li> </ul> |

|                       | <b><i>Key competences in national frameworks – present situation</i></b>   | <b><i>Developments in progress and future challenges</i></b>  |
|-----------------------|--|---|
| <b>Czech Republic</b> | <ul style="list-style-type: none"> <li>▪ The compulsory education curriculum is being reformed (see second column) – new Framework Educational Programme for the primary education was adopted in August 2004 and schools will have to comply as from the 2007-2008. All eight key competences are either explicitly or implicitly included.</li> <li>▪ Framework Educational Programmes for general and vocational secondary education will be in the pilot testing phase for the next two years.</li> <li>▪ In the field of adult education, the focus has been on improving employability, and the provision has included ICT, awareness of legal aspects and specific professional skills.</li> <li>▪ Counselling and guidance have been enhanced</li> </ul> | <ul style="list-style-type: none"> <li>▪ “National Programme for the development of Education in the Czech Republic” in 2000 initiated a curricular reform. The White Paper stresses the need for local application of the national frameworks and the development of key competences. Parliament has not yet adopted the bill.</li> <li>▪ The reform includes a new approach from pre-primary up to secondary education that is based on explicitly expressed package of knowledge, skills, attitudes and values for personal fulfilment, social inclusion and employability. Final attainment levels for each competence are defined (expected outputs – what pupils should be able to do after a specific period of education)</li> <li>▪ According to this new framework, schools will be given freedom to choose their working methods within the framework of the national objectives</li> <li>▪ National test are being planned to ensure overall quality; assessment would lead to a certificate that is intended to play a major role in the entrance examination for upper secondary schools</li> <li>▪ Other debates underway is the role of NGOs in public education</li> <li>▪ In adult education, more attention is expected to be paid to social, interpersonal and civic competences, as well as foreign languages</li> <li>▪ <a href="http://www.msmt.cz">www.msmt.cz</a>; <a href="http://www.vuppraha.cz">www.vuppraha.cz</a>; <a href="http://www.nuov.cz">www.nuov.cz</a>; <a href="http://www.uiv.cz">www.uiv.cz</a>; <a href="http://www.mpsv.cz">www.mpsv.cz</a></li> </ul> |
| <b>Cyprus</b>         | <ul style="list-style-type: none"> <li>▪ There is no framework as defined by WGB in place at the moment although some of the competences are embedded in the curriculum. The present curriculum has a strong emphasis on languages.</li> <li>▪ In adult education there is a successful programme for learning languages, dancing, cooking, house decoration and other topics offered in line with demand.</li> </ul>  | <ul style="list-style-type: none"> <li>▪ Discussion on the upper secondary national curriculum is underway; no specific proposals as yet.</li> <li>▪ A wider debate is needed on the competence-based approach among policy-makers on how to proceed in terms of curriculum reform and reform of teacher training.</li> <li>▪ <a href="http://www.moec.gov.cy">http://www.moec.gov.cy</a>; <a href="http://www.eey.gov.cy">http://www.eey.gov.cy</a></li> </ul>   |

|                | <b>Key competences in national frameworks – present situation</b>   | <b>Developments in progress and future challenges</b>   |
|----------------|---|---|
| <b>Denmark</b> | <ul style="list-style-type: none"> <li>▪ The national curriculum for the <i>folkeskole</i> (primary and lower secondary education) specifies both personal competences and subject-specific competences.</li> <li>▪ As a new element in the educational hierarchy, the local authority is to draft standards for the progression and continuity of teaching geared to threshold and final objectives. The standards are to be used as a tool for the teachers in their planning of the instruction and in cooperation on subjects and cross-curricular programmes with a view to supporting the individual pupil's development and needs.</li> <li>▪ The local authority is to ensure that consideration for the progression of pupils' competences is safeguarded through the curriculum guidelines or in any other appropriate manner. The Minister of Education will issue optional material on the standards for the progression of pupils' competences on the basis of the objects clause of the <i>folkeskole</i>.</li> </ul> | <ul style="list-style-type: none"> <li>▪ The national curriculum has been reformed in both the <i>folkeskole</i> (primary and lower secondary education) and the general and vocational gymnasium (upper secondary education).</li> <li>▪ Act on the <i>folkeskole</i> from 2003.</li> <li>▪ Act on general and vocational upper secondary schools, 2004.</li> </ul>  |
| <b>Finland</b> | <ul style="list-style-type: none"> <li>▪ The comprehensive education framework curriculum was recently revised. It is to be adapted by schools to local circumstances. The framework defines the main contents of the subjects, thematic entities and provides guidelines for student evaluation. WGB definitions are implicitly included; knowledge and skills are defined as well as socio-emotional and ethical aspects of different subjects. Thematic entities are operating principles that help schools to create an appropriate culture of learning. These are linked to personal growth, cultural identity and internationalisation, participatory citizenship and entrepreneurship.</li> <li>▪ The National Board of Education (NBE) provides training for teacher to deal with cross-curricular objectives</li> <li>▪ National assessment of the acquisition of certain subjects; results not published at school level but aim to guide overall educational policy</li> </ul>   | <ul style="list-style-type: none"> <li>▪ The national curriculum has been reformed in successive waves, from pre-primary to upper secondary level. The national frameworks form the basis for application at local level: municipalities are responsible for devising a curriculum that is applied by schools. For comprehensive education, the deadline for local application is 1 August 2006, for upper secondary schools 1 August 2005.</li> <li>▪ An extensive round of consultations was held regarding the drafts of the reformed curricula. Drafts have been available for comment on the NBE website.</li> <li>▪ The development of a national framework for evaluating educational outcomes, in particular learning-to-learn competence.</li> <li>▪ <a href="http://www.oph.fi">www.oph.fi</a>; <a href="http://www.edu.fi">www.edu.fi</a>; <a href="http://www.minedu.fi">www.minedu.fi</a></li> </ul> |

|                | <b>Key competences in national frameworks – present situation</b>   | <b>Developments in progress and future challenges</b>  |
|----------------|---|--|
| <b>France</b>  | <ul style="list-style-type: none"> <li>▪ The official curricula drawn up by the Ministry of Education specifies two categories on competences that should be developed during compulsory schooling: general competences and subject-specific competences.</li> <li>▪ The first category of competences relates to verbal and written communication. Subject-based competences are taught with the aim of ensuring good reading, writing and verbal skills for students.</li> <li>▪ There are no standards for assessing achievement. For language competence, the European reference framework is in use in secondary education.</li> </ul> | <ul style="list-style-type: none"> <li>▪ From 2002/2003, new “pathways to learning” have been introduced at lower-secondary level. These aim to encourage independent work on inter-disciplinary projects.</li> <li>▪ At primary level, artistic and cultural education has been enhanced.</li> <li>▪ A wide debate has taken place on basic competences that should be acquired by the end of compulsory schooling; a report is expected to be published in 2004.</li> </ul>  |
| <b>Germany</b> | <ul style="list-style-type: none"> <li>▪ The term key qualifications (<i>Schlüsselqualifikationen</i>) lay within the framework of vocational training. Germany’s participation in DeSeCo has widened the use of this term, competences which refers to cross-curricular competences that are essential in order to operate effectively at personal and professional level.</li> <li>▪ The <i>Länder</i> are responsible for framework curricula and, in most cases, the key competences can be found implicitly in those documents.</li> </ul>   | <ul style="list-style-type: none"> <li>▪ International studies have generated a debate on the quality of the education system in general. The importance of targets on basic competences acquisition, output-oriented control, quality assurance and development, broad-based support for students, quality management of schools have been the topics of the debate.</li> <li>▪ Standards have been established for subject-based competences such as German language, mathematics and foreign languages (EN, FR) from 2004 on by the Federal Conference of Ministers. The work continues for standards in biology, chemistry and physics. An institute for the quality of education will be established to monitor and improve educational standards.</li> </ul> |

|               | <b><i>Key competences in national frameworks – present situation</i></b>   | <b><i>Developments in progress and future challenges</i></b>   |
|---------------|--|--|
| <b>Greece</b> | <ul style="list-style-type: none"> <li>▪ The legislation refers implicitly to the key competences since primary and secondary education are to “contribute to harmonious and balanced personal development”.</li> <li>▪ The legislation and the framework curricula also stress the cross-curricular objectives such as cooperation and communication, interrelation between art and everyday life, making rational choices, taking care of health etc.</li> <li>▪ A practical implementation of the framework above is the Flexible Zone Programme for primary and lower-secondary education. It earmarks two to four teaching periods a for the pursuit of cross-curricular objectives.</li> <li>▪ There is no assessment of competences of school leavers at the moment.</li> </ul> | <ul style="list-style-type: none"> <li>▪ The programmes based on cross-curricular objectives were debated and it was recognised that the overall implementation of such reform will take around six to seven years. Time is needed for preparation of materials, the introduction of ICT in education, the promotion of foreign language learning and the development of methodologies for self-regulated learning. The new policy is to be fully implemented by 2005-2007.</li> <li>▪ A number of materials and courses for teachers aim to encourage teachers to deal with cross-curricular objectives, including the challenges of teaching children of foreign nationalities.</li> </ul> |

|                       | <b><i>Key competences in national frameworks – present situation</i></b>  | <b><i>Developments in progress and future challenges</i></b>   |
|-----------------------|---|--|
| <b><i>Hungary</i></b> | <ul style="list-style-type: none"> <li>▪ All competences listed by WGB are included in the National Core Curriculum and the National Development Plan.</li> </ul> | <ul style="list-style-type: none"> <li>▪ The central element of the current reform is to strengthen competence-based education. A legal basis for that was created in 2003 and the revised core curriculum starts in primary education in September 2004. Alongside this, the development of educational programme packages will start in 2004 and should be finalised by 2006.</li> <li>▪ The debated issues include the concept of “competence”, how to achieve a balance between different requirements of learning and the assessment of competence-based learning.</li> <li>▪ The needs of teacher training with regard to the reformed curriculum will be addressed by the Higher Education reform that is currently underway; there is a need to shift the culture in school towards more holistic approaches.</li> <li>▪ In the context of National Development Plan there is an intention to develop a lifelong learning policy with regard to key competences.</li> </ul> <p>Hungarian Ministry of Education <a href="http://www.om.hu">www.om.hu</a><br/> National Institute of Public Education <a href="http://www.oki.hu">www.oki.hu</a><br/> National Public Education and Assessment Centre <a href="http://www.okev.hu">www.okev.hu</a><br/> Centre for Evaluation Studies <a href="http://ek.mobtech.hu">ek.mobtech.hu</a></p> |

|                | <b>Key competences in national frameworks – present situation</b>   | <b>Developments in progress and future challenges</b>   |
|----------------|---|---|
| <b>Ireland</b> | <ul style="list-style-type: none"> <li>▪ <b>Key competences</b> are not specifically identified within the curriculum for primary or post-primary (secondary) schools</li> <li>▪ At <b>primary level</b>, the curriculum is designed to nurture the child in all dimensions of his/her life - spiritual, moral, cognitive, emotional, imaginative, aesthetic, social and physical. Literacy and numeracy are prioritised as essential skills within the curriculum.</li> <li>▪ In <b>post primary</b> schools, skills are embedded in the subject-based curriculum. It is expected that certain skills are developed across the curriculum, in context and to the best of each student's ability. These skills comprise: communication and literacy skills, numeracy skills, manipulative skills, information technology skills, thinking and learning skills, problem-solving skills, personal and interpersonal skills, social skills</li> <li>▪ <b>In adult education</b> literacy and numeracy programmes are the top priority</li> </ul> | <ul style="list-style-type: none"> <li>▪ At <b>primary</b> level, a fully revised curriculum was introduced in 1999. Its implementation which is taking place on a phased basis will not be completed until 2007.</li> <li>▪ At <b>post-primary</b> level, a review of <b>Junior Cycle</b> (lower secondary education) commenced in 1999. Following extensive consultation, areas for development and action were identified in early 2000. These include curriculum overload and overlap, assessment and transition from primary to post-primary school. These issues are being addressed within individual subjects.</li> <li>▪ Plans for a full reform of <b>senior-cycle education (upper secondary)</b> are currently being developed. The embedding of key skills in the curriculum is a central element of this development plan. Recommendations include: <i>there should be a strong emphasis on skills alongside the knowledge content of subjects and subject syllabuses should be expressed in terms of the learning outcomes that will be achieved, including learning outcomes related to skills.</i></li> <li>▪ <b>The National Framework of Qualifications</b> (launched in October 2003) establishes a single, coherent award system for all levels of education and training in the State. The framework comprises ten levels. For each level, standards of knowledge, skill and competence have been set out in generic ranges. The standards associated with each level define the outcomes to be achieved by learners seeking to gain awards.</li> </ul> |

|                       | <b><i>Key competences in national frameworks – present situation</i></b>  | <b><i>Developments in progress and future challenges</i></b>   |
|-----------------------|---|--|
| <b><i>Iceland</i></b> | <ul style="list-style-type: none"> <li>▪ The National Curriculum Guide implicitly includes clearly defined objectives that closely correspond to the framework of WGB.</li> <li>▪ Mother tongue, foreign languages, maths and science are annually tested and results are made public.</li> <li>▪ The provision for adults has increased considerably in recent years with a wide variety of local and distance-learning opportunities and a high level of participation in LLL. ICT plays a central role in the provision. Recognition of informal and non-formal learning is promoted by the Education and Training Service Centre (established in 2002).</li> </ul>  | <ul style="list-style-type: none"> <li>▪ Reform in <b>life skills</b> since 1999</li> <li>▪ Reform of ICT launched seven years ago, in connection with eLearning initiative</li> <li>▪ Discussion on restructuring upper secondary education and reducing its duration to three years</li> <li>▪ Debate on key competences, i.e. the content and strategies of teaching; cross-curricular approaches, etc.</li> <li>▪ In adult education and training the need for ensuring job-qualifications is high, in particular as regards vulnerable groups – work has started to improve the situation.<br/><a href="http://eng.menntamalaraduneyti.is/">http://eng.menntamalaraduneyti.is/</a><br/><a href="http://menntagatt.is/default.aspx?pageid=151">http://menntagatt.is/default.aspx?pageid=151</a><br/><a href="http://www.fraedslumidstod.is/default.asp?webid=5">http://www.fraedslumidstod.is/default.asp?webid=5</a></li> </ul> |
| <b><i>Italy</i></b>   | <ul style="list-style-type: none"> <li>▪ The National School Education Reform Act (2003) introduced a national framework based on general and specific objectives, not explicitly on competences or key competences. However each school has to set up educational activities for pupils expected to reach personal competences defined in the “Educational, cultural and professional profile” attached to the legislative Decree (2004).</li> <li>▪ Cross-curricular work has been strong in Italian schools and part of the teachers’ working time is devoted to planning activities and sharing responsibilities within school</li> <li>▪ Until now there were no collective evaluation tools for the acquisition of key competences, but a pilot project on the construction of tools for the assessment of some competences (mother tongue, maths and science) has been implemented in the last three years.</li> </ul> | <ul style="list-style-type: none"> <li>▪ The debate on key competences is underway.</li> <li>▪ As from the current school year English and ICT will be mandatory in the first class of primary education, and there will be a gradual introduction of a mandatory second foreign language from the age of ten/eleven.</li> <li>▪ The obstacles to cross-curricular teaching are the lack of time, planning and the lack of assessment systems as regards cross-curricular objectives</li> </ul>  |

|                         | <b><i>Key competences in national frameworks – present situation</i></b>   | <b><i>Developments in progress and future challenges</i></b>   |
|-------------------------|--|--|
| <b><i>Latvia</i></b>    | <ul style="list-style-type: none"> <li>▪ The educational components described in the National Standards for Compulsory Education are closely related to the domains defined by WGB.</li> <li>▪ After a recent reform, all academic upper secondary school will from 2004 use centrally coordinated examinations for enrolment purposes.</li> <li>▪ Diagnostic tests are in use after grades 3 and 6 and a state examination after grades 9 and 12.</li> </ul>  | <ul style="list-style-type: none"> <li>▪ Strong focus in developing the teaching of natural sciences. Extension of the lessons for ICT and social skills are also planned.</li> <li>▪ Teaching cross-curricular objectives faces a firm tradition of subject based teaching.</li> <li>▪ Second chance programmes have been developed and introduced for those who do not successfully complete compulsory education.</li> <li>▪ Introduction of bilingual education starts from 2004/2005 for grades 10 after which up to 40% of subjects will be taught in a minority language, with the rest in Latvian and foreign languages.</li> </ul> <p><a href="http://www.izm.gov.lv">www.izm.gov.lv</a>; <a href="http://www.isec.gov.lv">www.isec.gov.lv</a></p>        |
| <b><i>Lithuania</i></b> | <ul style="list-style-type: none"> <li>▪ Individual competences necessary for life in a modern society and for lifelong learning are acknowledged by legislation. The Guidelines for National Educational Strategy for 2002-2012 also place emphasis on key competences. The National framework curriculum explicitly states that the overall goal for primary and secondary education is to develop personal, social and cultural skills. The definition of language competence includes communicative, social and cultural aspects.</li> <li>▪ The concept of lifelong learning is included in the main strategic document guiding the development of education. The main focus is on foreign languages, ICT and social skills.</li> </ul> | <ul style="list-style-type: none"> <li>▪ Development is underway for a competence-based curricula that stresses the competences for, among other things, learning to learn, communication, arts in primary and learning to learn, communication, interpersonal and civic skills, entrepreneurship and cultural awareness in lower-secondary education.</li> <li>▪ The next reform of the curriculum for lower- and upper secondary education (within four years) is planned in accordance with the framework defined by WGB.</li> <li>▪ A variety of debates have taken place on changing the education system.</li> </ul> <p><a href="http://www.smm.lt">www.smm.lt</a>; <a href="http://www.vpu.lt">www.vpu.lt</a>; <a href="http://www.su.lt">www.su.lt</a></p> |

|                          | <b><i>Key competences in national frameworks – present situation</i></b>   | <b><i>Developments in progress and future challenges</i></b>   |
|--------------------------|--|--|
| <b><i>Luxembourg</i></b> | <ul style="list-style-type: none"> <li>▪ The WGB framework has been used in developing new educational frameworks for pre-school and primary education</li> <li>▪ The concept of “key competences” has considerably influenced the pupil assessment guidelines (seen as an “operational framework”) in primary education from 2003 onwards; it has also had an impact on educational material. The same applies as regards renewed teacher training.</li> </ul>  | <ul style="list-style-type: none"> <li>▪ In secondary education, a curriculum reform is underway.</li> </ul>   |
| <b><i>Malta</i></b>      | <ul style="list-style-type: none"> <li>▪ The National Minimum Curriculum (1999) specifically comprises most of the competences defined by the WGB. However, learning to learn is referred to implicitly and elements of entrepreneurship can be deduced from the various elements of the document.</li> <li>▪ For adult education, there is a popular school for adults on a whole-day basis, evening schools, and associations focusing in particular on language teaching. Internet is free of charge in every locality; public libraries and educational TV channels provide non-formal education opportunities.</li> </ul> | <ul style="list-style-type: none"> <li>▪ A set of indicators for all subjects has been produced, each of which contain eight levels of descriptors; the work on these descriptors, involving all stakeholders, continues. Moreover, a national plan is underway to take stock of and improve competences in mathematics, English and Maltese (other subjects will follow).</li> <li>▪ Entrepreneurship education, learning to learn, and addressing cross-curricular objectives more effectively are 1 top priorities for future developments.</li> </ul> <p> <a href="http://www.education.gov.mt">www.education.gov.mt</a>; <a href="http://www.schoolnet.gov.mt:ictprimary">www.schoolnet.gov.mt:ictprimary</a>;<br/> <a href="http://www.curriculum.gov.mt:EAU">www.curriculum.gov.mt:EAU</a>; <a href="http://www.schoolsnet.gov.mt:dtie">www.schoolsnet.gov.mt:dtie</a> </p> |

|                    | <b>Key competences in national frameworks – present situation</b>  | <b>Developments in progress and future challenges</b>   |
|--------------------|--|---|
| <b>Netherlands</b> | <ul style="list-style-type: none"> <li>The existing national framework contains a wide range of detailed attainment targets (over 250); these targets comprise both subject-specific objectives and more general objectives.</li> </ul>                    | <ul style="list-style-type: none"> <li>A new set of targets will be presented in 2004 that are closer to the idea of a key competences framework. The goals will be set according to subjects that schools can organise in broader “learning areas”. This will allow for better integration of cross-curricular objectives. The new system will be launched in August 2006.</li> <li>The overall principle of education policy is to increase the autonomy of schools. Accordingly, policy focuses on teachers’ <i>skills</i> (e.g. in organising cross-curricular learning) rather than qualifications.</li> </ul> <p><a href="http://www.minocw.nl">www.minocw.nl</a>; <a href="http://www.vernieuwingbasisvorming.nl">www.vernieuwingbasisvorming.nl</a></p> |
| <b>Norway</b>      | <ul style="list-style-type: none"> <li>The core curricula for primary, secondary and adult education cover the skills in the key competences framework. Strong emphasis on learning as an active process, learning from projects, teamwork etc.</li> </ul> | <ul style="list-style-type: none"> <li>Discussions on introducing a second foreign language as obligatory in lower secondary schools, and on whether some competences such as digital skills should be introduced in all subject-specific plans.</li> <li>Teacher training encourages teamwork. This has been increased, which calls for more flexible use of time and working conditions in general.</li> </ul>  |
| <b>Poland</b>      | <ul style="list-style-type: none"> <li>In the new national framework (2002- ) the eight competences defined by WGB are covered, but modified according to national circumstances.</li> </ul>   | <ul style="list-style-type: none"> <li>There is a constant adjustment process of the new system underway that is carried out in close relation to social policies. Modules are being introduced to enable lower secondary students to participate more effectively in economic life, and to equip upper secondary students with entrepreneurial skills.</li> </ul> <p><a href="http://www.menis.gov.pl">www.menis.gov.pl</a>; <a href="http://www.kuratotium.gda.pl">www.kuratotium.gda.pl</a></p>  |

|                        | <b><i>Key competences in national frameworks – present situation</i></b>  | <b><i>Developments in progress and future challenges</i></b>  |
|------------------------|---|---|
| <b><i>Portugal</i></b> | <ul style="list-style-type: none"> <li>▪ The national curriculum for compulsory education (2002/2003- ) corresponds with the WGB framework, with the exception of entrepreneurship competence.</li> <li>▪ The new upper secondary curriculum and the document based on this (<i>National Curriculum – Key Competences</i>) is being distributed to schools and comprises cross-curricular objectives tying in with the WGB framework.</li> <li>▪ In the initial vocational training framework, there are some implicit references to key competences.</li> <li>▪ Various measures to encourage teachers to work on cross curricular objectives have been introduced.</li> </ul> | <ul style="list-style-type: none"> <li>▪ From the beginning of 2004/05, all compulsory schools will follow the new competence-based curriculum.</li> <li>▪ In upper secondary education, a new subject on ICT has been introduced as part of a broader curriculum reform (to come into force in 2004/05). Key competences are referred to in the new syllabuses of most subjects.</li> <li>▪ The initial vocational training framework curricula are being restructured in accordance with the WGB framework.</li> <li>▪ Assessment of the competences has been discussed. The management of schools and the expectations of <u>parents</u> have been a challenge with regard to broader competence development.</li> </ul>   |
| <b><i>Romania</i></b>  |   | <ul style="list-style-type: none"> <li>▪ Compulsory education has been recently extended from 8 to 10 years.</li> <li>▪ New curriculum for upper secondary education with some structural changes in the whole system will come into force in 2004/2005. The reform follows closely the ideas of the “E&amp;T 2010” process in general and the WGB framework in particular.</li> <li>▪ Vocational training is also undergoing major transformations in line with developments at European level.</li> <li>▪ The future challenges include enhancing entrepreneurship education, learning-to-learn skills and civic and interpersonal skills. There is also a need for creating a lifelong learning strategy for the country.</li> </ul> <p><a href="http://www.mec.edu.ro">www.mec.edu.ro</a>; <a href="http://www.portal.edu.ro">www.portal.edu.ro</a>; <a href="http://www.cnc.ise.ro">www.cnc.ise.ro</a></p> |

|                 | <b>Key competences in national frameworks – present situation</b>   | <b>Developments in progress and future challenges</b>   |
|-----------------|---|---|
| <b>Slovenia</b> | <ul style="list-style-type: none"> <li>No national framework, but several guideline documents for schools are in accordance with the eight competences defined by the WGB. The legislation concerning pre-school, primary and secondary education also refers to broader competences, such as interpersonal skills and cultural awareness.</li> <li>A specific law on adult education emphasises lifelong learning and the provision to cover a broad range of competences.</li> </ul>  | <ul style="list-style-type: none"> <li>The National Curricula Council has conducted a major reform at all levels of education on the basis of 25 goals set for improving the education and training systems of Slovenia. The new curricula reflect more closely the present understanding of broader competences. In particular, the reform of VET will change considerably the approach to learning.</li> </ul> <p> <a href="http://www.zrss.si">www.zrss.si</a>; <a href="http://www.mszs.si/eng">www.mszs.si/eng</a>; <a href="http://www.siae.acs.si">www.siae.acs.si</a>; <a href="http://www.cpi.si">www.cpi.si</a>; <a href="http://www.ric.si">www.ric.si</a> </p>  |
| <b>Spain</b>    | <ul style="list-style-type: none"> <li>Legislation covers competences such as communication in the mother tongue and foreign languages, mathematics, science and technology. The other competences (ICT, learning to learn, interpersonal and social competence, civic competence, cultural awareness and entrepreneurship) are more dispersed in the curriculum under various subject headings or objectives.</li> <li>The decrees regulating compulsory education include objectives, contents and assessment criteria. <b>Objectives are expressed in terms of competences, including knowledge, skills and occasionally attitudes.</b></li> <li>National testing is organised in basic areas such as reading comprehension, grammar and literature, maths and science, geography and history; the results are available on a database.</li> </ul> | <ul style="list-style-type: none"> <li>The recent law on quality of education adopted by the Spanish Parliament describes the levels of competences to be acquired in primary and secondary education. These competences correspond to the framework of WGB.</li> <li>There is a wide debate underway on the objectives of education in general.</li> <li>Teacher in-service training has been strongly focused on the competences needed by teachers to deal with the objectives of the new legislation; however, the challenge remains to change thinking in schools in order to focus more attention on these aspects.</li> <li>There is a need to improve the learning of languages, ICT and entrepreneurship.</li> </ul> <p> <a href="http://www.mecd.es/leycalidad/index.htm">www.mecd.es/leycalidad/index.htm</a>; <a href="http://www.ince.mec.es">www.ince.mec.es</a> </p> |

|               | <b><i>Key competences in national frameworks – present situation</i></b>   | <b><i>Developments in progress and future challenges</i></b>   |
|---------------|--|--|
| <b>Sweden</b> | <ul style="list-style-type: none"> <li>▪ The WGB domains of key competences are permeating the national curricula and the whole system of Swedish education, and the key competences are referred to both implicitly and explicitly. In general, management by objectives characterises the system.</li> <li>▪ Adult education provides for learners' individual needs from a curriculum that covers the key competences. This is the responsibility of the municipalities.</li> </ul> | <ul style="list-style-type: none"> <li>▪ An Educational Law Commission reviewed recently the legislation with regard to pupils' rights and the decentralisation of the education system. Another central issue is the integration of pre-school and school-age childcare into the education system.</li> <li>▪ As regards upper secondary education, a reform is underway to adapt it to meet more effectively the requirements of modern society and working life, increase the number of students in higher education, reduce the drop-out rate, open up schools to society, and raise the status of vocational training.</li> </ul> <p><a href="http://www.skolverket.se">www.skolverket.se</a>; <a href="http://www.skolutveckling.se">www.skolutveckling.se</a>; <a href="http://www.cfl.se">www.cfl.se</a></p> |

|                            | <b><i>Key competences in national frameworks – present situation</i></b>   | <b><i>Developments in progress and future challenges</i></b>  |
|----------------------------|--|---|
| <b><i>UK (England)</i></b> | <ul style="list-style-type: none"> <li>▪ In England, the National Curriculum for Schools sets out a statutory entitlement to learning for all pupils from ages 5 to 16 in maintained schools.</li> <li>▪ The English School National Curriculum has five compulsory subjects for pupils. These cover the EU competences of Literacy and Language (English) Numeracy (Mathematics) and ICT, Science and Technological Culture (Design and Technology compulsory up to age 14). Social skills are included in the Personal, Social and Health curriculum but this is not a compulsory core subject and entrepreneurship is to some extent integrated across the curriculum.</li> <li>▪ The UK government has a Key Skills framework, that is primarily accessed by young people, which comprises six discrete skills: communication, application of number, ICT, working with others, improving own learning and performance and problem solving. In addition there is also a Skills for Life framework aimed at adults which supports achieving the government target of improving the literacy, numeracy and language skills of 2.25 million individuals by 2010.</li> </ul> | <ul style="list-style-type: none"> <li>▪ ICT is to be developed as an additional basic skill under the Skills for Life umbrella.</li> <li>▪ From 2002 in England, citizenship has been included as part of the statutory curriculum for secondary schools.</li> <li>▪ A National Framework for the teaching of personal, social and health education in schools has also been created.</li> <li>▪ A Strategy for England published in December 2002 aims to ensure that all 7 to 11-year-olds should have the opportunity to learn a foreign language.</li> <li>▪ There is also a longer term strategy to secure greater coherence in provision for 14 to 19-year-olds. This includes reforming the curriculum and qualifications on offer. This offer will have at its core literacy, numeracy and ICT skills with other attributes, aptitudes and capabilities (similar to the key competences) embedded in other subjects. A recent review of numeracy and mathematics teaching will contribute to future reforms in this area.</li> </ul> |

|                          | <b><i>Key competences in national frameworks – present situation</i></b>  | <b><i>Developments in progress and future challenges</i></b>  |
|--------------------------|---|---|
| <b>UK<br/>(Scotland)</b> | <ul style="list-style-type: none"> <li>▪ The school curriculum in Scotland is non-statutory. Overall strategic direction of the education system in Scotland is set by Ministers through the National Priorities in Education.</li> <li>▪ The National Priorities include the commitment to raise standards of achievement in the core skills of literacy and numeracy, and to teach them the duties and responsibilities of citizenship in a democratic society; and to encourage creativity and ambition.</li> <li>▪ The 5-14 curriculum in Scotland covers the structure, content and assessment of the curriculum in primary schools and in the first two years of secondary education. It is divided into five broad curricular areas: language, mathematics, environmental studies, expressive arts, and religious and moral education..</li> <li>▪ In the later stages of secondary school education (S3-S6), the National Qualifications framework recognises five core skills (communication, numeracy, information technology, problem-solving and working with others).</li> <li>▪ The Scottish Executive is integrating enterprise in education across the curriculum.</li> </ul> | <ul style="list-style-type: none"> <li>▪ Ministers established a Review Group in November 2003 to look at the curriculum from ages 3 to 18 The overall aim of the Review Group was to identify the purposes and principles of school education in order to reform the curriculum. The outcome of this work will be published in Autumn 2004.</li> <li>▪ The Scottish Executive plans to publish a joint schools/further education college strategy in April 2005, and to implement the strategy as from the academic year 2005/06.</li> </ul> |

**Table 3: Overview on measuring key competences  
-Participation in international studies and national measurement tools**

| Country                        | Participation in international studies   | National level measurement of key competences  |  |   |
|--------------------------------|--|--|--|---|
|                                |  | Competence(s)  | Target group(s)  | Measurement tools (frequency, sample size etc.) and the use of results in monitoring policies   |
| <b>Austria</b>                 | PISA, TIMMS,<br>PIRLS not yet decided  | Reading, maths, first foreign language with an emphasis on cross-curricular objectives   | 4 <sup>th</sup> year of primary and 4 <sup>th</sup> year of lower-secondary pupils               | Development and piloting underway for national standards  |
| <b>Belgium (Flemish Comm.)</b> | PISA, TIMSS, IALS  | 1) French, maths and reading<br>2) Acquiring and processing information  | Lower secondary pupils   | 2)From 2004: periodic survey  |
| <b>Belgium (French Comm.)</b>  | PISA   | Reading, maths and sciences  | 3 <sup>rd</sup> and 5 <sup>th</sup> in primary; 1 <sup>st</sup> and 5 <sup>th</sup> in secondary | Diagnostic tests  |
| <b>Czech R.</b>                | PISA, TIMMS, PIRLS, IALS   | Development underway for measuring expected outputs after 5 <sup>th</sup> and 9 <sup>th</sup> grade as well as the acquisition of cross-curricular objectives. |  |   |
| <b>Denmark</b>                 | PISA, OECD review on the Quality and Equity of School Outcomes, IALS, IEA-Civics | Evaluation and test-instruments to be applied at primary and lower secondary level are to be developed.  | Primary and lower secondary pupils.  | The OECD review on the "Quality and Equity of School Outcomes" has significantly impacted the political agenda as far as the primary and lower secondary school is concerned. The minister has initiated four focus groups, and several initiatives to monitor quality and enhance innovation are expected to follow.<br>The national grade 9/10 leaving examinations consists of oral and written tests in Danish, maths and English, followed by oral tests in other subjects.<br><b>Results from the national leaving examinations at grade 9 or 10 are collected at national level and made public.</b> |
|                                | PISA, IALS   |  |  | National evaluation framework for educational outcomes.   |

| Country        | Participation in international studies | National level measurement of key competences  |  |  |
|----------------|--|--|--|--|
|                |  | Competence(s)  | Target group(s)  | Measurement tools (frequency, sample size etc.) and the use of results in monitoring policies  |
| <b>Finland</b> |  | Educational outcomes in mother tongue, mathematics, natural history, learning to learn, plus some thematic areas   | Lower secondary students   |  |
| <b>France</b>  | PISA, PIRLS                            | No data  |  |  |
| <b>Germany</b> | PISA, PIRLS, IALS                      |  |  | Uniform tests requirements for school leaving certificate, standards that should be attained on completion of certain years of schooling.  |
| <b>Greece</b>  | PISA, PIRLS                            | Occasional use of evaluation sheets on pupils' learning, and self-evaluation sheets for students themselves; no systematic national use of results   |  |  |
| <b>Cyprus</b>  | TIMSS, PIRLS                           | Final level (grade 12) of high school education has an examination for all school-leavers which is the same for all and standardised. Students are awarded a high-school leaving certificate only after having passed this exam. |  |  |
| <b>Hungary</b> | PISA, TIMMS, PIRLS, IALS               | Reading and mathematical literacy in pupil's daily lives and in further learning.  | The survey covers all 6 <sup>th</sup> and 8 <sup>th</sup> grade students and it is analysed at the national level. | National Assessment of Basic Competences (NAT ABC) are organised annually in each school to assess the knowledge and skills. Results are analysed at national level. It contributes to developing the overall assessment procedures of schools. All schools get a report from the National Assessment Centre which contains data of the school and national level data on the pupils' achievement. <i>Moreover, the study tries to reveal the added value of the school to student's potential by taking into account the possible disadvantage.</i> |
| <b>Ireland</b> | IALS (1994)                            | 1) Reading literacy  | 1) 1 <sup>st</sup> and 5 <sup>th</sup> classes in primary schools in 2004  | 1) A national reading survey takes place every five years.   |
|                | TIMSS (1995)                           | 2) Learning outcomes (post primary)  | 2) Pupils at the end of compulsory schooling   | 2) National examinations. "Assessment of Learning" tool under development  |
|                | PISA (from 2000)                       | 3) ICT, communication, maths for adults  | 3) Further-education students  | 3) Portfolios  |

| Country           | Participation in international studies | National level measurement of key competences  |  |   |
|-------------------|--|--|--|---|
|                   |  | Competence(s)  | Target group(s)  | Measurement tools (frequency, sample size etc.) and the use of results in monitoring policies   |
| <b>Iceland</b>    | PISA, PIRLS<br>TIMSS (1995)            | 1) Mother tongue and maths<br>2) Mother tongue, foreign languages, maths, natural sciences and social sciences<br>3) Mother tongue, English and maths<br>4) Vocational qualifications in certified trades  | 1) Grades 4 and 7<br>2) Grade 10, pupils finishing compulsory school.<br>3) Matriculation examination<br>4) Journeyman's examination   | 1-2) Are nationally co-ordinated annual examinations. The results are made public. The exams at grade 4 and 7 are solely for diagnostic purposes, but the results of the exams in grade 10 determine entry into different branches of study in upper secondary schools.<br>3) These exams will be held each term as from spring 2005.<br>4) One examination committee for each certified trade, comprised of representatives for the social partners in that trade, coordinates at national level the Journeyman's examination.   |
| <b>Italy</b>      | PISA, TIMSS,<br>PIRLS, IALS            | No tools in use at the moment. However, starting from 2005, after a pilot project implemented over the last three years, standardised test (mother tongue, maths and science) will be administered to a sample population. This will be compulsory in primary education (2 <sup>nd</sup> and 4 <sup>th</sup> grades) and in lower secondary education (1 <sup>st</sup> grade), and non-compulsory in upper secondary education (1 <sup>st</sup> and 3 <sup>rd</sup> grades). |  |   |
| <b>Latvia</b>     | TIMSS, PIRLS,<br>PISA                  | 1) Literacy<br>2) Literacy and maths<br>3) General outcomes (e.g. Latvian, maths, sciences, foreign languages)   | Pupils finishing<br>1) 3 <sup>rd</sup> grade<br>2) 6 <sup>th</sup> grade<br>-3) 9 <sup>th</sup> grade<br>12 <sup>th</sup> grade  | 1) National tests<br>2) National tests<br>3) National exams and national centralised exams<br>As from 2004, higher-education institutions will enrol students on the basis of these national centralised exams  |
| <b>Lithuania</b>  | PISA from 2006 -,<br>TIMSS,<br>PIRLS   | 1) Mother tongue, maths and natural and social sciences<br>2) Mother tongue competence and maths literacy<br>3) ICT literacy<br>4) National <i>Matura</i> examinations: mother tongue, maths, foreign languages, natural and social sciences, art and music  | 1) 4 <sup>th</sup> class in primary and 8 <sup>th</sup> , 10 <sup>th</sup> grades in lower secondary.<br>2) Pupils finishing lower secondary education (10 <sup>th</sup> grade)<br>3) Pupils finishing upper secondary education (12 <sup>th</sup> grade)<br>4) Pupils finishing upper secondary education | 1) National evaluations of subject-based competences every two years based on samples. Results are analysed at national level, at schools and by subject teachers. This contributes to developing the assessment of schools and improving of the national curriculum.<br>2) National evaluation of the results, which helps pupils to choose a learning profile in upper secondary education and forms part of the entrance requirements to vocational training<br>3) National tests<br>4) Graduation certificate. Since 2000, higher-education institutions have been enrolling students on the basis of these national exams. |
| <b>Luxembourg</b> | PISA                                   | Foreign language competence, mathematical literacy   | Primary students   | Standardised tests provided for schools   |

| Country         | Participation in international studies | National level measurement of key competences  |  |  |
|-----------------|--|--|--|--|
|                 |  | Competence(s)  | Target group(s)  | Measurement tools (frequency, sample size etc.) and the use of results in monitoring policies  |
| Malta           |  | Subject in National Minimum Curriculum (NMC)   | Compulsory education   | A set of indicators has been developed to measure the acquisition of skills referred to in the NMC – the work is continuing on a set of descriptors for to each skill.   |
| The Netherlands | PISA, PIRLS, TIMSS, IALS               | The Dutch Inspectorate is working on such tools. These will be available in 2005/2006            |  |  |
| Norway          | PISA, IALS                             | Reading, writing, maths and English  | Compulsory and upper secondary students  | National tests are being introduced from 2004. School-level results will be published nationally. Individual results will be available for students and teachers (“learners profile”) to facilitate individualising of teaching/learning |
| Poland          | PISA, IALS                             | All subjects except ICT  | Students finishing primary and lower secondary education                                     | National tests   |
|                 |  |  |  | Certificates of Quality of Education have been introduced to schools. It provides a variety of tools for e.g. internal evaluation, improved support for pupils, and an improved atmosphere within schools.                               |
| Portugal        | PISA, IALS                             |  | 4 <sup>th</sup> ; 6 <sup>th</sup> and 9 <sup>th</sup> grade students in compulsory education | National tests for each level; performance levels to be established by 2004  |
|                 |  |  | Initial vocational training students   | Portfolio assessment   |
| Romania         | PISA, TIMSS, PIRLS                     | Mother tongue, maths, history, geography   | 8 <sup>th</sup> grade students   | National tests, the results of which form part of the entrance requirements to upper secondary education   |
|                 |  | Basic competences  | Students finishing primary education   | National evaluations every two to three years, based on samples  |
|                 |  | All subjects/competences   | Graduates of high schools  | Graduation certificate and a <i>lifelong learning portfolio</i> is awarded to students   |
| Slovenia        | TIMSS, PIRLS                           | Developing different methods of assessing pupils, such as portfolios, descriptive assessment etc |  |  |

| <b>Country</b>       | <b>Participation in international studies</b> | <b>National level measurement of key competences</b>   |                                     |   |
|----------------------|---|--|-------------------------------------|---|
|                      |   | <b>Competence(s)</b>   | <b>Target group(s)</b>              | <b>Measurement tools (frequency, sample size etc.) and the use of results in monitoring policies</b>  |
| <b>Spain</b>         | PISA  | Reading, grammar, literature, maths, science, geography, history   | Lower secondary?                    | Study in 1997. No database available, instruments and results kept for internal use   |
| <b>Sweden</b>        | PISA, TIMSS, PIRLS, IALS                      | Literacy, numeracy, foreign languages  | Compulsory education                | Annual tests for subjects and, every third year, tests for measuring attitudes among students, parents and teachers (learning to learn) etc. since 1994   |
| <b>UK (England)</b>  | PISA, TIMSS, PIRLS, IALS(UK)                  | English, mathematics, science, ICT, design and technology, (citizenship included in upper secondary only, and not tested)<br><br>ICT, literacy, numeracy | Primary and Secondary<br><br>Adults | National Curriculum covers the period of compulsory education from 5 to 16 in four Key Stages. At the end of each Key Stage (i.e. 7, 11, 14 and 16) attainments in specified subjects are tested. Key Stage 4 assessment is conducted through the General Certificate of Secondary Education (GCSE).<br><br>Survey undertaken in 2003 provides a national profile over three areas of competence (literacy, numeracy and ICT). The findings are used to map and target low level skills provision, and by central government to focus on priority groups. |
| <b>UK (Scotland)</b> | PISA, TIMSS, PIRLS, IALS(UK)                  | English, maths, science, and social subjects   | 5-14                                | In Scotland, attainment in the 5-14 programme is currently monitored through the Assessment of Achievement Programme (AAP) which assesses a sample of pupils in P3, P5, P7 and S2 in English language, mathematics, science and social subjects. The most recent surveys have also made some assessment of core skills e.g. communication, numeracy, ICT.   |