

## IV

(Notices)

## NOTICES FROM EUROPEAN UNION INSTITUTIONS, BODIES, OFFICES AND AGENCIES

## COUNCIL

**Council conclusions on increasing the level of basic skills in the context of European cooperation on schools for the 21st century**

(2010/C 323/04)

THE COUNCIL OF THE EUROPEAN UNION,

people who cannot read properly and to improve the achievement of learners from migrant or disadvantaged backgrounds <sup>(3)</sup>.

HAVING REGARD TO:

The 2006 Recommendation of the European Parliament and of the Council on key competences for lifelong learning <sup>(1)</sup>, which presents the European reference framework of eight key competences that all young people should develop during their initial education and training. Acquiring basic skills <sup>(2)</sup> in reading literacy, mathematics and science at school level is crucial for the development of key competences across the lifelong learning continuum. These skills evolve throughout the process of acquisition of key competences, as learners work with more and more complex information with accuracy and understanding, and so underpin qualities such as problem solving, critical thinking and initiative and creativity;

3. The November 2008 conclusions of the Council and of the Representatives of the Governments of the Member States, meeting within the Council <sup>(4)</sup>, set an agenda for European cooperation on schools and reiterated that there was insufficient progress towards the targets set on reading literacy. The Council agreed on the need to guarantee and improve the acquisition of reading literacy and numeracy as essential components of key competences. Member States were invited to focus cooperation on increasing the levels of literacy and numeracy and on stimulating greater interest in MST.

AND WHEREAS:

1. Improving reading literacy was one of the thirteen objectives established under the 'Education and Training 2010' work programme in 2002. It was also one of the five reference levels of European average performance ('European benchmarks') set by the Council in 2003: namely that, by 2010, the percentage of low-achieving 15-year-olds in reading literacy in the European Union should have decreased by at least 20 % compared to the year 2000. As for mathematics, science and technology (MST), another benchmark to be achieved by 2010 was to increase by at least 15 % the total number of graduates in these subjects.

4. The May 2009 Council conclusions on a strategic framework for cooperation in education and training ('ET 2020') <sup>(5)</sup> restated the importance of literacy and numeracy as fundamental elements of key competences and of making mathematics, science and technology more attractive. The new benchmark adopted by the Council under the framework aims at an adequate level of basic skills in reading, mathematics and science, by calling for the share of low achievers in reading, maths and science to be reduced to below 15 % by 2020.

2. The March 2008 European Council renewed its call to the Member States to reduce substantially the number of young

5. The 2010 joint progress report of the Council and the Commission on the implementation of the 'Education and Training 2010' work programme <sup>(6)</sup> emphasised the importance of partnerships between education institutions and the world of work as a means of enhancing

<sup>(1)</sup> Recommendation 2006/962/EC of the European Parliament and of the Council, (OJ L 394, 30.12.2006, p. 10).

<sup>(2)</sup> For the purposes of this text, the term 'basic skills' should be understood as basic skills in reading, mathematics and science, as referred to in the new European benchmark under the 'ET 2020' strategic framework.

<sup>(3)</sup> Doc. 7652/08, paragraph 15, p. 10.

<sup>(4)</sup> OJ C 319, 13.12.2008.

<sup>(5)</sup> OJ C 119, 28.5.2009.

<sup>(6)</sup> OJ C 117, 6.5.2010.

competences and gaining insights into professional life and careers. Collaborative schemes between schools, universities and industry have been recognised by experts as having a positive impact on MST learning.

6. Most recently, at the June 2010 European Council meeting, Member States agreed on the objective of improving education levels in the context of the Europe 2020 Strategy for growth and jobs<sup>(1)</sup>, in which the issue of basic skills forms an integral part of both the 'smart growth' and 'inclusive growth' agendas and contributes to flagship initiatives such as the *Agenda for New Skills and Jobs* and the *Digital Agenda*;

#### NOTING THAT:

1. While there has been a general improvement in education and training performance in the EU over the last decade, progress has been insufficient to reach the European benchmarks agreed for 2010. Indeed, the reading and mathematics skills of 15-year-olds in Europe have on average weakened. The share of low-achievers in reading increased from 21,3 % in 2000 to 24,1 % in 2006<sup>(2)</sup>, while for mathematics the share rose from 20,2 % to 24 %<sup>(3)</sup>. The average share of low performers in science in the Member States was 20,2 % in 2006<sup>(4)</sup>.
2. There is also evidence that pupil performance in basic skills is influenced by their socio-economic background and the educational attainment of their parents. In all Member States for which comparable data exist, the performance in reading, mathematics and science of pupils with a migrant background is lower than that of native pupils<sup>(5)</sup>.
3. In recent decades Europe has faced a growing demand for qualified human resources in mathematics, science and technology. While the corresponding European benchmark for 2010 has been met, the needs to which it referred are still relevant. Overall graduation rates have risen, largely thanks to computer science and enlargement, but growth has been far weaker in mathematics, statistics and engineering, while in physics it has in fact fallen. In addition, female students continue to be severely under-represented in these subjects<sup>(6)</sup>.

<sup>(1)</sup> Docs. EUCO 7/10 of 26 March 2010 and 13/10 of 17 June 2010.

<sup>(2)</sup> [http://ec.europa.eu/education/lifelong-learning-policy/doc34\\_en.htm](http://ec.europa.eu/education/lifelong-learning-policy/doc34_en.htm)

<sup>(3)</sup> PISA 2006. (BG and RO are included in the figure for 2006 but not for 2003).

<sup>(4)</sup> N.B. Comparable figure for 2000 not available.

<sup>(5)</sup> PISA 2006.

<sup>(6)</sup> See 'Progress towards the Lisbon objectives in education and training: Indicators and benchmarks — 2009', Chapter III, p. 97 on gender imbalance among graduates in MST.

4. There are many initiatives aimed at improving reading literacy within the Member States, as well as national, regional and local measures designed to improve both attitudes to, and attainment in, mathematics and science. Furthermore, in recent years many Member States have included issues related to attainment and attitudes towards mathematics and science on their policy agendas. They have also assigned significant resources to improving school science education. Programmes targeting the early acquisition of basic skills and personalised approaches to learning are emerging as explicit strategies in most countries<sup>(7)</sup>.

#### AND RECALLING THAT:

With specific regard to mathematics, science and technology:

1. Work on MST under the open method of coordination has found that innovative pedagogies and well-qualified teachers can improve pupils' attitudes towards, and attainment in, MST. This in turn can lead to more pupils pursuing studies in these fields at higher levels and ultimately to an increase in the number of MST graduates.
2. The 2007 Commission report *Science education now: a renewed pedagogy for the future of Europe*<sup>(8)</sup> recommended greater use of inquiry-based science education, breaking the isolation of science teachers through networks, paying special attention to girls' attitudes to maths, science and technology, and opening up schools towards the wider community.

#### RECOGNISES THAT:

1. The acquisition of basic skills — a foundation for developing key competences for all on a lifelong learning basis — will play a crucial role in improving citizens' employability, social inclusion and personal fulfilment. Action is therefore required to fight educational underachievement and social exclusion.
2. A good level of reading literacy and numeracy, together with a solid grasp of the basic principles of the natural world and of fundamental scientific concepts, provide the basis for the acquisition of key competences for lifelong learning and thus need to be addressed from an early age.

<sup>(7)</sup> Joint Report on progress towards the Lisbon objectives (COM(2009) 640).

<sup>(8)</sup> Prepared by the high level group of experts in science education under the chairmanship of MEP Michel Rocard. See [http://www.ec.europa.eu/research/science-society/document\\_library/pdf\\_06/report-rocard-on-science-education\\_en.pdf](http://www.ec.europa.eu/research/science-society/document_library/pdf_06/report-rocard-on-science-education_en.pdf)

3. The basic skills of reading literacy and mathematics are also building blocks of the 'learning to learn' competence: they help individuals to access, gain, process, assimilate and communicate new knowledge and skills, as well as help them to become autonomous learners.
4. International data, including PISA and TIMSS studies, have identified systemic issues such as differences between schools and variations in pupil backgrounds (for instance due to socio-economic circumstances, the level of parents' education, the availability of ICT equipment at home, etc.) as factors that affect performance in reading, mathematics and science.
5. The qualifications, competences and commitment of teachers, school leaders and teacher educators are important factors in achieving high-quality educational outcomes. It is therefore essential to provide the highest standard of initial education, induction and continuing professional development for teaching staff and school heads, backed up by the necessary educational and professional support services.
6. Attaining the new, ambitious benchmark set under the 'ET 2020' strategic framework will require more effective national initiatives. The economic downturn, combined with the demographic challenge, underlines the urgency of improving to the greatest possible extent the efficiency and equity of school systems, while continuing to invest efficiently in education and training, so as to meet current and future economic and social challenges.

AGREES THAT:

In addressing the complex issue of improving achievements in reading literacy and MST, attention should be paid to the following:

### 1. Curriculum design

This could include issues such as: an early start to acquiring basic skills, a holistic approach to education which entails the development of all of each child's abilities, the use of new assessment methods and their effect on the curriculum, the use of innovative pedagogical approaches such as inquiry-based science education (IBSE) and problem-based learning (PBL) in mathematics and science, continuous attention to reading literacy at all levels of education as opposed to just in the pre-primary and primary phases, and more personalised approaches to teaching and learning.

### 2. Motivation for reading literacy and MST

Having a reading culture at home (books, newspapers, children's books) as well as at school, early literacy activities before starting school, parents' own reading and attitudes, pupils' interests, self-efficacy and engagement in reading activities both inside and outside school have all proven to have a crucial impact on improving reading levels. Learning methods should better exploit children's natural curiosity in mathematics and science from an early age. It is important to help children to become autonomous, motivated learners, for whom literacy as well as the use of mathematical and scientific competences become part of everyday life.

### 3. The impact of new technologies on basic skills and their use in helping learners to acquire autonomy and maintain motivation

These technologies, such as the extended use of internet and mobile technologies, have changed the nature and perception of reading literacy in the 21st century. The influence of new technologies on children's reading and their mathematical and scientific competences should be scrutinised, so as to ensure appropriate methods to exploit the potential of such technologies for new forms of learning.

### 4. The gender dimension

There are significant gender differences in the fields of reading literacy, maths and science, both in terms of attitude and performance. Girls are often more motivated to read than boys, and do so better. The gender differences in performance in MST are not as significant as those in reading. Educational choices are still gender-segregated to a large degree. Boys tend to be more interested in further study and a career in MST than girls. The underlying reasons for such trends should be further investigated and effective strategies identified with a view to reducing the gap between the sexes in both performance and attitudes <sup>(1)</sup>.

### 5. The nature of the link between pupil background (both socio-economic and cultural aspects) and the level of mastery in basic skills

Pupils with a disadvantaged socio-economic background and/or a migrant background, particularly those who speak a different language to that of the host country, are much more likely to underperform in school. The impact of the social profile of the pupils and their families appears to be greater in schools where there are more disadvantaged pupils <sup>(2)</sup>.

<sup>(1)</sup> See *Gender differences in educational outcomes: a study on the measures taken and the current situation in Europe* (Eurydice, 2010).

<sup>(2)</sup> PISA 2006 (OECD, 2007), *Messages from PISA 2000* (OECD, 2004).

## 6. Teachers and teacher educators

Initial teacher education, induction and teachers' continuous professional development should focus on developing and practising the competences needed to enable teachers of any subject to reinforce the acquisition of basic skills (particularly reading literacy), at both primary and secondary level. Moreover, in order to overcome qualification shortfalls, there should be more emphasis on the subject-specific education of those who specialise in the teaching of basic skills (particularly MST). Encouraging networking between MST teachers and linking up MST education with the research and scientific community and the world of work might also prove helpful in this respect. Finally, further efforts are required to address the general imbalance in the teaching profession by making careers in teaching more attractive to men, in order to ensure that pupils have role models in both genders.

## 7. School ethos and characteristics

This includes an emphasis on reading instruction, on innovation in teaching and learning, on the quality of school life, as well as school location, size and openness to the world outside school, on cooperation with parents and with a wide range of stakeholders.

ACCORDINGLY INVITES THE MEMBER STATES TO:

1. Establish or further develop strategic national approaches to improving the performance of school pupils in reading literacy, mathematics and science, paying particular attention to pupils with a disadvantaged socio-economic background.
2. Analyse and evaluate the effectiveness of existing approaches at national level in order to further develop an evidence base for policy making.

INVITES THE COMMISSION TO:

1. Set up a high-level expert group, whose task should be to analyse existing research, studies and international reports on reading literacy focused on the issues outlined in these conclusions. This group should examine the most effective

and efficient ways of supporting reading literacy throughout lifelong learning and, on the basis of good policy examples, should draw conclusions and make proposals aimed at supporting policy in the Member States by the first half of 2012.

2. As a follow-up to the work of the MST Cluster under the open method of coordination, establish a thematic working group of policy-makers and experts from the Member States to support progress towards the new 'ET 2020' benchmark.
3. Facilitate peer-learning and the identification and dissemination of good practice between Member States in the field of attainment in the basic skills, and monitor and report on progress towards the 'ET 2020' benchmark.

AND INVITES THE MEMBER STATES AND THE COMMISSION TO:

1. Ensure that meetings of Directors-General responsible for school education take place when appropriate, in order to take note of the progress achieved in European policy cooperation on schools issues, to inform national policy-making and to discuss priorities for future work at EU level in this field, and that the results of such discussions are widely disseminated among all relevant stakeholders and, where appropriate, discussed at the level of Ministers.
2. Promote opportunities for developing joint pilot projects between Member States aimed at improving basic skills for all young people through innovative approaches. The projects would be organised on a voluntary basis in accordance with jointly agreed criteria, would be subject to a common assessment, and would make use of existing EU instruments.
3. Use all relevant instruments, such as those forming part of the open method of coordination, the Lifelong Learning Programme, the 7th Framework Programme for Research and Technological Development and, in accordance with national priorities, the European Structural Funds, in order to promote the above aims.