



COMMISSION OF THE EUROPEAN COMMUNITIES

Brussels, 8.9.2006
COM(2006) 481 final

**COMMUNICATION FROM THE COMMISSION TO THE COUNCIL
AND TO THE EUROPEAN PARLIAMENT**

Efficiency and equity in european education and training systems

{SEC(2006) 1096}

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1. INTRODUCTION

1. The 2006 Spring European Council¹ outlined the twin challenges which Europe's education and training systems face when it concluded that they are critical factors to develop the EU's long-term potential for competitiveness as well as for social cohesion. It stated that reforms must be stepped up to ensure high quality education and training systems that are both efficient and equitable. These issues are central to the fulfilment of the EU's objectives in the Lisbon Partnership for Growth and Jobs and the Open Method of Coordination for Social Inclusion and Social Protection.
2. Across Europe, in the context of public budget constraints and the challenges of globalisation, demographic change and technological innovation, greater emphasis is being placed on improving efficiency in the education and training sector. This is desirable, of course, but it is frequently assumed that efficiency and equity objectives are mutually exclusive. It is too often the case that existing education and training systems reproduce or even compound existing inequities.
3. However, the evidence shows that viewed in a wider perspective, equity² and efficiency³ are, in fact, mutually reinforcing and this Communication focuses on policies where this is the case. It aims to inform policy-makers about trends in other Member States and the supporting research available at EU level, to help their decision making in the ongoing process of system reform. The Staff Working Paper⁴ sets out the detailed underlying evidence.

1.1 Facing the economic and social challenges

4. The EU is facing four interrelated socio-economic challenges: globalisation, and the emergence of newly industrialised and highly competitive countries; demography, in the form of Europe's ageing population and migration flows; rapid change in the nature of the labour market; and the technology-driven ICT revolution. Each of these has an impact on the challenge of providing good education for all. People with low

¹ European Council 23-24 March 2006, Presidency Conclusions par. 23

² Equity is viewed as the extent to which individuals can take advantage of education and training, in terms of opportunities, access, treatment and outcomes. Equitable systems ensure that the outcomes of education and training are independent of socio-economic background and other factors that lead to educational disadvantage and that treatment reflects individuals' specific learning needs. Inequity in relation to gender, ethnic minority status, disability and regional disparities etc. is not the prime focus here, but is relevant as far as it contributes to overall socio-economic disadvantage

³ Efficiency involves the relationship between inputs and outputs in a process. Systems are efficient if the inputs produce the maximum output. Relative efficiency within education systems is usually measured through test and examination results, while their efficiency in relation to wider society and the economy is measured through private and social rates of return.

⁴ Staff Working Paper (SWP) (SEC (2006) 1096)

qualifications are at an increasing risk of unemployment and social exclusion. In 2004, 75 million EU citizens were low-skilled (32% of the workforce) but by 2010 just 15% of the new jobs will be for those with only basic schooling.⁵

5. Education and training policies can have a significant positive impact on economic and social outcomes, including sustainable development and social cohesion, but inequities in education and training also have huge hidden costs which are rarely shown in public accounting systems. In the US, the average gross cost over the lifetime of one 18-year-old who has dropped out of high school is an estimated 450,000 US dollars (350,000 euros). This includes income tax losses, increased demand for health-care and public assistance, and the costs of higher rates of crime and delinquency.⁶ In the UK if 1% more of the working population had A-levels rather than no qualifications, the benefit to the UK would be around £665 million per year through reduced crime and increased earning potential.⁷
6. Policies which reduce such costs can deliver both equity and efficiency benefits. Member States can maximise the real and long-term returns from their education and training systems by considering equity alongside efficiency when taking decisions about system reform.

2. PLANNING FOR EFFICIENCY AND EQUITY IN LIFELONG LEARNING STRATEGIES

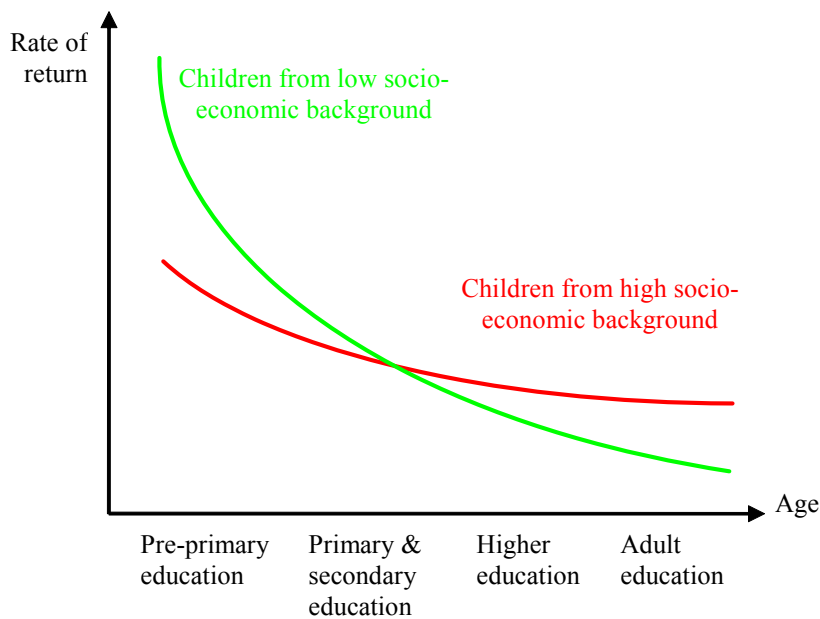
7. Investments in education and training take time to bear fruit so when deciding on spending priorities, governments should allow for long-term planning at local and national levels. As the next section shows, pre-primary education has the highest rates of return of the whole lifelong learning continuum, especially for the most disadvantaged, and the results of this investment build up over time.

⁵ SWP, p. 5

⁶ SWP, pp. 13-14

⁷ SWP, pp. 12-13

Figure 1: Returns to investment at different levels of lifelong learning



Source: Cunha et al (2006) adapted by EENEE⁸

8. This need for long-term investment planning underlines the importance of National Lifelong Learning Strategies, which Member States have agreed to adopt by the end of 2006. National and European qualifications frameworks will facilitate the validation of learning in all contexts. This is important for promoting equity because many of the least advantaged build up key competences and skills⁹ in non-formal and informal education. Ensuring that all learning is validated and transferable in order to remove “dead ends” in learning pathways is both an efficiency and an equity gain.¹⁰
9. A culture of evaluation is needed within education and training systems. Effective long-term policies must be based on solid evidence. For Member States to fully understand and monitor what is happening in their systems, they need channels for producing and accessing relevant research, a statistical infrastructure capable of collecting the necessary data, and mechanisms to assess progress as policies are implemented.
10. Educational policies alone cannot address educational disadvantage. There is an interplay of personal, social, cultural and economic factors which combine to limit educational opportunities. Cross-sectoral approaches are important to link education and training policies with those related to employment, the economy, social inclusion, youth, health, justice, housing and social services. Such policies should also be designed to correct regional imbalances in education and training.

⁸ European Expert Network on Economics of Education (EENEE): www.education-economics.org

⁹ COM(2005)548, 2005/0221 (COD), “Proposal for a Recommendation of the European Parliament and of the Council on key competences for lifelong learning”

¹⁰ SWP, pp. 15-16

Member States should develop a culture of evaluation. They should develop policies for the whole lifelong learning continuum which take full account of efficiency and equity in combination and in the long term, and which complement policies in related fields.

3. DELIVERING EFFICIENCY AND EQUITY IN EDUCATION AND TRAINING POLICIES

3.1. Pre-primary education: Focusing on learning at an early age

11. There is a substantial body of evidence that participation in high-quality pre-primary education has long-lasting benefits in terms of achievement and socialisation during individuals' schooling and careers because it facilitates later learning.¹¹
12. European and U.S. experience shows that early intervention programmes, especially those targeted at disadvantaged children, can produce large positive socio-economic returns, and that these persist well into adulthood.¹² Effects include better school achievement, grade retention, employment rates, earnings, crime prevention, family relationships and health. However, in order to offset disadvantage throughout the education system, pre-primary programmes need to be followed up with subsequent interventions, such as support for language learning and social adjustment, otherwise their beneficial effects tend to decay. Lack of investment in early learning leads to substantially higher levels of remedial spending at later life stages, which is less cost-effective and can be linked with increased spending on crime, health, unemployment and other social policies.
13. A number of European countries have introduced spending policies targeted at reinforcing early education and tackling disadvantage from the earliest age (e.g. BE, ES, FR, IT, HU). Such policies are highly effective in efficiency and equity terms and justify high priority in the allocation of public and private expenditure.
14. The type of early childhood provision and the pedagogy to be used should be considered carefully. Programmes focusing on learning as well as personal and social competences tend to produce better outcomes and, consequently, greater knock-on effects throughout life.¹³ The supply of specially trained pre-primary teachers will need to be improved in many countries. Parental engagement is essential to the success of pre-primary education and, in the case of the disadvantaged, this can be encouraged through dedicated parental education and outreach programmes.

Pre-primary education has the highest returns in terms of the achievement and social adaptation of children. Member States should invest more in pre-primary education as an effective means to establish the basis for further learning, preventing school drop-out, increasing equity of outcomes and overall skill levels.

¹¹ SWP, pp. 15-16, 18

¹² SWP, pp. 18-19

¹³ SWP, pp. 18-19

3.2. Primary and secondary education: Improving the quality of basic education for all

15. Compulsory education and training systems should provide the basic education and key competences required by all to prosper in a knowledge-based society. This is especially important for some disadvantaged groups and where Member States are providing for a large number of migrants and ethnic minorities. Education systems with early ‘tracking’¹⁴ of students exacerbate differences in educational attainment due to social background, and thereby lead to even more inequitable outcomes in student and school performance.¹⁵ Tracking has been considered effective in some Member States, where whole schools are tailored to groups of students with similar needs and levels of achievement. However, the evidence brings this into question. Those European countries (e.g. DE, LI, LU, NL, AT) that track pupils at an early age display greater variation in pupil achievement than countries with more integrated school systems.
16. Early tracking has especially negative effects on the achievement levels of disadvantaged children. This is partly because it tends to channel them towards less prestigious forms of education and training. Postponing tracking until upper secondary level, combined with the possibility to transfer between school types, can reduce segregation and promote equity without diminishing efficiency.¹⁶
17. Many Member States (e.g. BE-NL, CZ, IE, IT, LV, HU, PT, SK, UK)¹⁷ have sought to improve efficiency through decentralisation, by giving individual institutions more discretion in determining course content, allocating budgets or making personnel decisions. The rationale is usually that knowledge of local circumstances and specific needs make decentralised decision-making more efficient. Accountability systems in the form of central exit examinations and internal evaluation systems exist in most European countries (e.g. DK, EE, EL, FR, IE, IT, CY, LV, LT, HU, MT, NL, AT, PL, PT, SI, FI, UK, LI, NO, RO).¹⁸ There is some international evidence that the combination of local autonomy for institutions and central accountability systems can improve student performance. However, accountability systems should be designed to ensure a full commitment to equity and to avoid the potentially inequitable local consequences of decentralised decisions, e.g. on the definition of school catchments. Some countries have built equity objectives and incentives into their accountability systems, combined with follow up actions for institutions failing to meet the required equity standards.
18. The most important factors for efficiency and equity are the quality, experience and motivation of teachers and the types of pedagogy they use. Working in collaboration with parents and pupil welfare services, teachers can play a key role in securing participation of the most disadvantaged. This is particularly effective where schools

¹⁴ This refers to the segregation of children into separate schools based on ability before the age of 13. Whilst this need not necessarily involve a division into academic/general and vocational tracks, in practice this tends to be the case. This definition does not include streaming, which involves tailoring the curriculum to different groups of children based on ability, but within the same school.

¹⁵ SWP, pp. 19-20

¹⁶ SWP, p. 22

¹⁷ SWP, pp. 22-23

¹⁸ SWP, pp. 23-24

have inclusion strategies which are continuously updated and based on pedagogical research. Member States have struggled to find the right mix of measures to encourage experienced and motivated teachers into the most challenging schools.¹⁹ Developing recruitment policies that ensure high-quality teaching is available to disadvantaged pupils should be a priority.

The bulk of research suggests that education and training systems which track pupils at an early age exacerbate the effect of socio-economic background on educational attainment and do not raise efficiency in the long run. Efficiency and equity can both be improved by focussing on improving teacher quality and recruitment procedures in disadvantaged areas, and designing autonomy and accountability systems which avoid inequity.

3.3. Higher education: Improving investment while widening participation

19. Higher education is a key sector of the knowledge-based economy and society. It is at the heart of the ‘knowledge triangle’ of education, innovation and research. As the Commission’s Communication on the Modernisation of Universities²⁰ makes clear, the EU higher education sector faces numerous challenges and needs to be modernised if it is to become more competitive and promote excellence. One challenge is to create diversified systems which allow equitable participation for all, while remaining financially viable and playing their roles more efficiently. The Commission has already proposed that the EU should aim, within a decade, to devote at least 2% of GDP to all the activities of a modernised higher education²¹ sector in order to build a knowledge-based society.
20. There has been a steady growth in student numbers and a widening of the expectations placed upon European universities, but funding levels have not risen accordingly. At the same time, the expansion of student numbers has not increased equity as it has mostly favoured individuals from higher socio-economic groups or those whose parents attended higher education.²²
21. A common assumption has been that a “free” system of higher education (one funded entirely by the state) is, of itself, equitable. In fact, this assumption has not been borne out by reality, since the main determining factor in participation is socio-economic background. The bulk of evidence shows that there are usually significant private returns to those who participate in higher education, and that these are not entirely offset by progressive tax systems. This can have a reverse redistribution effect. This regressive effect is particularly acute where school systems exacerbate the effects of socio-economic background on educational attainment. In order to bring about a more equitable balance between the costs funded by individuals and society and the benefits accrued by each,²³ and to contribute to providing universities with the extra funding they need, many countries are turning to the main direct beneficiaries of higher education, the students, to invest in their own futures by

¹⁹ SWP, p. 25

²⁰ COM (2006) 208 final

²¹ COM (2006) 208 final. See also, COM (2006) 30 & COM (2005) 152

²² SWP, pp. 25-26

²³ The average private rate of return from higher education is close to 9% across ten OECD countries.

paying tuition fees (e.g. BE, ES, IE, NL, AT, PT, UK, LI).²⁴ Evidence also suggests that the market effects of tuition fees may improve the quality of teaching and management in universities, and reinforce student motivation.²⁵

22. Clearly, the development of tuition fees without accompanying financial support for poorer students risks aggravating inequity in access to higher education. The most disadvantaged are frequently the most risk and debt-averse, and are more likely to balk at spending time studying, rather than earning, when private returns after graduation are not assured. This is particularly relevant where the level of tuition fees is based on estimated future rates of return, with an implicit assumption that the economy will continue to reward graduates at the same level as now. By guaranteeing bank loans and offering income-contingent loans, scholarships and means-tested grants, governments can encourage access by less wealthy students. Such schemes have already been introduced in a number of European countries (e.g. BE, ES, FR, IE, IT, LV, LT, NL, AT, PT, UK, LI). These are too recent to have been fully studied, but evidence from Australia and the U.S. shows that tuition fees complemented by targeted financial support increase student numbers without having a negative effect on equity.²⁶
23. As a result of inequities earlier in the education cycle, pupils from disadvantaged backgrounds often do not achieve the level of qualifications needed to access higher education. Even those that do are often reluctant to consider going on to university.²⁷ Policies to reinforce efficiency and equity of school systems are vital, along with action to change cultural perceptions of higher education. To this end, information about the opportunities and advantages afforded by higher education should be targeted at school pupils, through school visits, mentoring programmes and lifelong guidance, and, crucially, at families when children are relatively young.²⁸ Universities should be encouraged to develop comprehensive outreach and access policies, which could include the introduction of bridging programmes and earmarked places.

Free access to higher education does not necessarily guarantee equity.. To strengthen both efficiency and equity Member States should create appropriate conditions and incentives to generate higher investment from public and private sources, including, where appropriate, through tuition fees combined with accompanying financial measures for the disadvantaged. Specific actions at school level are also needed. Higher education institutions should offer a more differentiated range of provision and incentives to meet increasingly diverse social and economic needs.

3.4. Vocational education and training: Improving quality and relevance

24. As our population ages, the persistently high level of youth unemployment in the EU is an increasingly serious problem. By 2050 there will be 65% more Europeans aged

²⁴ SWP, pp. 27-29

²⁵ SWP, p. 28

²⁶ SWP, p. 29

²⁷ SWP, p. 28

²⁸ SWP, p. 29

65 or more, and 20% fewer of working age (15-64 years).²⁹ There is also increased demand for those with higher skills. Labour market entrants with the lowest levels of educational achievement face the highest risks of unemployment. While early intervention to increase participation and raise achievement is the most efficient method to improve employment prospects, the transition from the world of education to that of work is crucial. Evidence suggests that in countries with well-developed systems of vocational education and training (VET), participants can expect reasonable earnings returns.³⁰ Removing dead ends in vocational systems so that students can access tertiary education is key to increasing their attractiveness. Member States should develop flexible and clear pathways through vocational education to further learning and employment. This should help achieve a balance of those with higher education and vocational qualifications which better reflects the needs of the labour market.

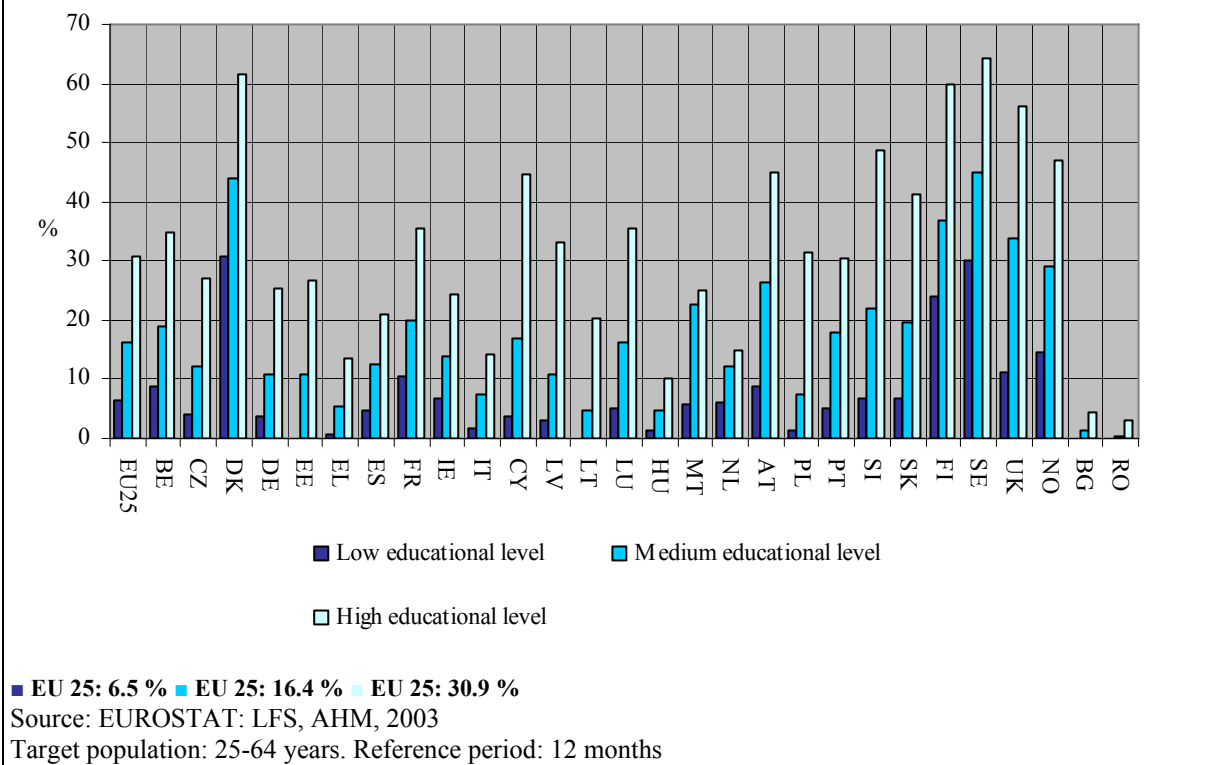
25. Given the challenges of an ageing population, better opportunities for adult learning are important for both equity and efficiency, not least to re-engage the low skilled in learning and help them become better adapted to the changing labour market. Employers tend to provide work-based training to the higher skilled, which brings substantial earnings returns to the individual and the employer.³¹ However, enterprises have proven reluctant to provide training for the disadvantaged, the less well educated and those lacking basic skills.
26. Only 10.8% of European adults participate in formal, non-formal or informal lifelong learning, a long way short of the EU benchmark of 12.5% participation by 2010. Data on the previous educational attainment of those in non-formal learning (figure 2) show that people at the bottom of the qualifications ladder are least likely to participate in further learning and so to improve their employment prospects.

²⁹ SWP, p. 30

³⁰ SWP, p. 30

³¹ SWP, p. 31

Figure 2: Participation of 25-64-year-olds in non-formal learning by educational attainment (%), 2003



27. The social and cultural benefits of training are important as they provide a sense of social engagement and can help adults re-enter the learning cycle. In equity terms, the unemployed and those who have not succeeded in the compulsory education system require access to publicly-funded adult training schemes, but the track record of such schemes in improving the employment prospects of disadvantaged adults has been generally poor.³² Two approaches can help improve this situation.
28. Firstly, successful vocational and adult training schemes are often based on partnerships between business, the public sector, social partners and local third sector organisations.³³ They focus on specific target groups and their needs. Partnerships at upper-secondary level can also engage young people at risk of dropping out, by offering an alternative learning environment.³⁴ There is clearly a cost involved in such initiatives, but the costs of inaction and the consequent high numbers of drop-outs are considerably greater.³⁵
29. Secondly, training must be strongly linked to employers' skills needs. It should be made relevant to the labour market by engaging business, not only through partnerships, but also by increasing the "on-the-job" component. To match labour supply and demand better and to facilitate education and career choices, governments

³² SWP, pp. 33-34
³³ The Council and Commission have recognised the importance of social dialogue: http://ec.europa.eu/comm/employment_social/social_dialogue/
³⁴ SWP, pp. 34-37
³⁵ SWP, pp. 12-14

should further develop information on skills needs for the labour market. Government support for industry and sector-wide training schemes has the potential to encourage private investment because costs for firms and workers are kept down through shared overhead costs.³⁶ Also, the risk of poaching - one common disincentive for employer investment in training - is reduced. Employers should invest in education and training to remain competitive and to fulfil their corporate social responsibility to become 'learning organisations'.³⁷ Training schemes related to the labour market have proved especially effective in increasing employment opportunities for the disadvantaged when they focus on the skill needs of the regional and local economy.³⁸

Member States should develop clear and diverse pathways through VET to further learning and employment. They should also improve public training programmes for the unemployed and for disadvantaged learners. The quality and relevance of such programmes can be enhanced by encouraging stakeholder partnerships at a regional and local level and facilitating private sector involvement.

4. EUROPEAN UNION ACTION

30. Member States clearly have the main role in tackling the challenges set out in this Communication. In addition to the recommendations addressed to them, action is also necessary at EU level. Global economic competition and social trends have similar impacts depending on each country's situation. The added value of a European approach is that diverse education and training systems can benefit from mutual learning and exchanges of best practice.
31. The new Lifelong Learning Programme will support the mobility of millions of individuals, giving them new skills and helping them adapt to the European labour market, and through transnational cooperation it will strengthen the quality and interconnectedness of our education and training institutions. This programme will work in synergy with the new Structural Funds arrangements, which will support system reforms and projects to develop education and training provision.
32. Within the framework of the revised Lisbon Strategy and the "Education and Training 2010" Work Programme, the EU helps Member States design and implement their education and training policies by facilitating the exchange of information, data and best practice through mutual learning and peer review. Efficiency and equity will be a priority theme in this work and the EU will provide particular support to develop a culture of evaluation and to exchange best practice on pre-primary education. The Commission also intends to take forward work on adult learning, the development of a European Qualifications Framework and a European framework of statistics and indicators. This will be underpinned by research into efficiency and equity funded through the seventh EU framework for R&D.

³⁶ SWP, pp. 34-35, 37-38

³⁷ COM(2006)136, "Implementing the Partnership for Growth and Jobs: Making Europe a pole of excellence on Corporate Social Responsibility"

³⁸ SWP, p. 38