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**IMPLEMENTING THE
“EDUCATION AND TRAINING 2010” WORK PROGRAMME**

2005 Progress Report
2005 Progress Report



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Education and Training 2010 – Finland's interim report

**REFORM OF THE EDUCATION AND TRAINING SYSTEM AND
THE COMMON OBJECTIVES SET BY THE EUROPEAN UNION FOR 2010**

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1. INTRODUCTION: FINNISH EDUCATION POLICY AND COMMON EUROPEAN OBJECTIVES

The level of education among the population of Finland is high and the quality of education and training is good. Investment in research is also high. Nevertheless, the education and training system is faced with major challenges over the next few years. Demographic development and the ageing workforce, combined with simultaneous efforts to raise the employment rate, entail a flexible education and training system responsive to change, provision of education and training for entire age groups and full use of all the talent reserves as well as better access to education and training for the adult labour force. Challenges include raising the level of education among the whole population, enhancing the quality and effectiveness of education and training, prevention of social exclusion among young people and reducing differences in the level of education between age groups. In addition, internationalisation and changes in social and cultural environments also entail renewal of the education and training system.

1.1. Development targets in Finnish education and training

The Government has defined the objectives of education, training and research within the administrative sector of the Ministry of Education in its development plan entitled 'Education and Research 2003–2008'¹. According to this plan, the development priorities for education and training are as follows:

- ***Enhancing competence and raising the level of education among the population and the labour force.*** The aim is to increase the relative share of people with at least upper secondary qualifications – either the general upper secondary school certificate or an initial vocational qualification – among 25–29-olds from the present 85% to at least 90% and the share of higher education graduates aged 30–34 from the present 40% to at least 50% by 2015.
- ***Enhancing the efficiency of the education and training system.*** Firstly, the aim is to step up young people's transition from basic education to upper secondary level and then on to higher education or working life. With this in mind, upper secondary and university application and selection procedures are being developed. Secondly, the aim is to speed up completion of studies. Parliament is currently considering Government proposals aiming to increase the efficiency of financing of education and training, speed up university studies and improve incentives in student financial aid. Reform of the funding system for vocational education and training and polytechnics is being prepared with a view to increasing the significance of performance in funding criteria.
- ***Prevention of social exclusion among children and young people.*** The target is for at least 96% of those leaving comprehensive school in 2008 to begin general

¹ Koulutus ja tutkimus 2003–2008. Kehittämissuunnitelma. Opetusministeriön julkaisuja 2004:6. Yliopistopaino, Helsinki 2004. <http://www.minedu.fi/julkaisut/index.html>. [Available in English: Education and Research 2003–2008. Development Plan. Publications of the Ministry of Education 2004:8. Helsinki University Press 2004. <http://www.minedu.fi/publications/index.html>.]

upper secondary school, vocational education and training or voluntary additional basic education during the same year. In 2001, the proportion was 93.2%, while the figure for 2003 was 94.5%. Measures include increasing remedial teaching, special needs education, guidance counselling and pupil/student welfare services, developing immigrant education and training and realising the education and training guarantee.

- ***Enhancing adults' opportunities for education and training.*** The aim is to raise adults' skills level and keep their competence up-to-date. The target set in this respect is to enable the adult population to participate in education or training for 1–2 weeks annually and in more thorough upgrading of competence over a period of about six months every 10–15 years. Measures include increasing provision of self-motivated adult education and training and targeting provision to adults without upper secondary qualifications in particular.

1.2. The EU's 'Education & Training 2010' programme and Finland's national objectives

The following passages examine the European objectives set in the follow-up process of the 'Education & Training 2010' work programme from the perspective of Finnish national education policy. A detailed comparison of indicators and reference levels adopted by the Council with national results is presented in Appendix 1², national measures to promote higher education (the Bologna process) can be found in Chapter 4 and the measures to promote vocational education and training (the Copenhagen process) will be explained in Chapter 5.

1.2.1. Improving the quality and effectiveness of education and training

- *Improving education and training for teachers and trainers.* In order to qualify as teachers in Finland, people are required to have a higher university degree (Master's degree)³. Teacher education and training is developed in accordance with a specific development programme⁴. Development targets include student selection procedures in teacher education, pedagogical studies and teachers' continuing professional education. The number of study places has been increased due to teachers' age structure and developments in student numbers. Implementation of the programme is due to be evaluated in 2005.
- *Developing skills for the knowledge society.* The Finnish National Board of Education co-ordinates a development project for guidance counselling being implemented between 2003 and 2007, which aims to develop counselling and guidance services and staff in-service training in basic education, upper secondary education and training and adult education and training⁵. In addition, the National

² See Appendices, Table 1.

³ Exceptions are the qualifications requirements for vocational teachers of certain fields; depending on the field, the requirement may be a higher university degree (Master's), a polytechnic degree or the highest available qualification in the field.

⁴ Opettajankoulutuksen kehittämisohjelma 2001–2005. [Teacher Education Development Programme 2001–2005. Summary available in English at www.minedu.fi/julkaisut/OPEKO/opekoeng.pdf.]

⁵ National Board of Education. <http://www.oph.fi/kehittamishankkeet> [Not available in English.]

Board of Education co-ordinates education development projects for improvement of comprehensive school pupils' reading and writing skills (the Reading Finland project, 2001–2004)⁶ and for special needs education in pre-primary, basic and general upper secondary education (2002–2004)⁷ and the Development Programme for Mathematics and Science Education, launched in 2003⁸.

- *Ensuring access to ICT for everyone.* Since 1995, the Ministry of Education has steered development of the information society in education, training and research through strategic programmes. The Information Society Programme for Education, Training and Research 2004–2006⁹, drawn up by the Ministry of Education, focuses on development of citizens' information society skills, diverse use of information and communications technologies in educational institutions, establishment of effective procedures and promotion of social innovation through ICT. The aim by the year 2007 is for all those completing their studies to be given the opportunity to obtain the basic skills and knowledge required in an information society; for at least 75% of teachers to have the skills to use ICT in teaching; and for on-line instruction to be well-established. In line with the programme, measures have already been carried out to develop on-line instruction at all levels of education, increase broadband connections at schools and provide teachers with continuing professional education.
- *Increasing recruitment to scientific and technical studies.* Provision of mathematics and science education was expanded significantly in Finland during the 1990's. As a result, the proportion of students in these fields within all Finnish higher education students is the highest in the European Union (about 37% in 2002). Based on forecasts of demand for and supply of labour and developments in the occupational structure, there is no need to increase provision in Finland in the next few years. However, a specific development challenge is to increase the proportion of female students and graduates in these fields.
- *Making the best use of resources.* Measures to develop the funding systems for education and training will be described in Chapter 2 below.

1.2.2. Facilitating the access of all to education and training systems

- *Open learning environment.* On-line instruction has been developed at all levels of education in accordance with the Information Society Programme¹⁰. Educational provision of the distance upper secondary school, the Virtual Polytechnic and the Virtual University has been developed through national and ESF-funded development projects. Opportunities to complete studies in virtual

⁶ National Board of Education. <http://www.oph.fi/kehittämishankkeet> [In Finnish; English information available at <http://www.oph.fi/english/pageLast.asp?path=447,488,36263,36267>]

⁷ National Board of Education. <http://www.oph.fi/kehittämishankkeet> [Not available in English.]

⁸ National Board of Education. <http://www.oph.fi/kehittämishankkeet> [In Finnish; English information available at <http://www.oph.fi/SubPage.asp?path=1;443;6717;7806>]

⁹ Koulutuksen ja tutkimuksen tietoyhteiskuntaohjelma 2004–2006. Opetusministeriön julkaisuja 2004:12. Yliopistopaino, Helsinki 2004. [Available in English: Information Society Programme for Education, Training and Research 2004–2006. Publications of the Ministry of Education 2004:14. Helsinki University Press 2004.]

¹⁰ Koulutuksen ja tutkimuksen tietoyhteiskuntaohjelma 2004–2006. Opetusministeriön julkaisuja 2004:12. Yliopistopaino, Helsinki 2004. [Available in English: Information Society Programme for Education, Training and Research 2004–2006. Publications of the Ministry of Education 2004:14. Helsinki University Press 2004.]

form have increased in initial vocational education and training, polytechnics and universities. The operations of liberal adult education institutions, the Open University and the Open Polytechnic have been guaranteed a stable funding base.

- *Making learning more attractive.* Vocationally or professionally differentiated education and training is quantified in Finland according to envisaged labour needs¹¹. The aim is to guarantee initial vocational education and training or higher education for whole age groups, on the one hand, and to upgrade and update adults' skills levels, on the other. In 2004, 94.5% of comprehensive school-leavers continued their studies in vocational education and training, general upper secondary education or additional basic education during the same year. In order to improve young people's access to education and training, the Ministry of Education aims to guarantee accessibility of education and training throughout the country, intensify the use of study places and develop guidance counselling. In early 2005, the Ministry of Education appointed a working group to make proposals for measures to ensure post-comprehensive school opportunities for further studies for the whole age group.

In 2000, approximately 1.8 million 18–64-year-old Finns (about 54%) participated in education or training specifically provided for adults¹². The challenge is to raise the rate of participation in education or training among those with a low level of initial education. National measures will be discussed in Chapters 3 and 5.

- *Supporting active citizenship, equal opportunities and social cohesion.* In 2003, the Government initiated a Civil Participation Policy Programme¹³, which aims to increase citizens' participation in representative democracy and decision-making and strengthen the civil society. The programme places strong emphasis on the role of education, training and lifelong learning in promoting skills for active citizenship. Several projects have been launched within the framework of the programme, aiming to increase student participation in administration of education and training. The programme also supports education provided by liberal adult education institutions to promote civil society and active citizenship. Starting in 2005, the Ministry of Education has launched a new steering system of liberal adult education institutions in co-operation with liberal adult education organisations. The objective is to increase participation in education provided by liberal adult education institutions among groups of citizens that are currently under-represented in adult education and to increase provision in certain areas of education. These include immigrant education, instruction in basic information society skills and active citizenship education.

¹¹ Koulutus ja tutkimus 2003-2008. Kehittämissuunnitelma. Opetusministeriön julkaisu 2004:6. Yliopistopaino, Helsinki 2004. <http://www.minedu.fi/julkaisut/index.html>. [*Available in English:* Education and Research 2003–2008. Development Plan. Publications of the Ministry of Education 2004:8. Helsinki University Press 2004. <http://www.minedu.fi/publications/index.html>.] See also table 6.

¹² Osallistuminen aikuiskoulutukseen. Aikuiskoulutustutkimus 2000. Tilastokeskus. Koulutus 2002:5. Hakapaino Oy, Helsinki 2002. [*Available in English:* Participation in adult education and training in Finland. Adult Education Survey 2000. Statistics Finland. Helsinki.]

¹³ Kansalaisvaikuttamisen politiikkaohjelma. <http://www.valtionevosto.fi>. [*Civil Participation Policy Programme. English information available at* <http://www.valtionevosto.fi/vn/liston/base.jsp?r=40232&k=en>.]

1.2.3. Opening up the education and training system to the wider world

- *Strengthening the links with working life and research and society at large.* The aim is to consolidate interaction between education and training and working life at all levels of education. Polytechnic and university careers and recruitment services are being intensified. Development targets also include practical training periods during studies, improvement of the quality of on-the-job learning, development of vocational skills demonstrations and enhancement of the regional effectiveness of universities, polytechnics and vocational institutions.
- *Developing the spirit of enterprise.* The Entrepreneurship Policy Programme¹⁴, launched by the Government in 2003, aims to ensure that the business environment develops in a stable manner, which can also be predicted over a longer term, and to push Finland to be one of the leading European countries in terms of operating conditions for entrepreneurship. Within the Ministry of Education sector, the programme is used to improve citizens' abilities to become entrepreneurs, if they wish to do so, by increasing entrepreneurship education and training and by strengthening business competence at all levels of education.
- *Improving foreign language learning.* In addition to the mother tongue (Finnish/Swedish/Sami), the second national language (Swedish/Finnish) and one foreign language are compulsory for all pupils in basic education. However, the majority of comprehensive school pupils also study another foreign language as an optional subject. Foreign language instruction continues at upper secondary level. The national development projects for language teaching (the KIMMOKE Diversification of Language Teaching Programme 1996–2001 and the Language Teaching Development Project 2002–2004), co-ordinated by the National Board of Education, aimed to diversify the selection of languages and to reduce learning differences¹⁵.
- The national objectives for *increasing mobility and exchange* and *strengthening European co-operation* have been determined in the Development Plan for Education and Research. The objectives and national development measures will be described in more detail in Chapter 6 below.

1.3. Provision of information about the Education & Training 2010 programme in Finland

The Ministry of Education and the National Board of Education organise seminars for representatives of educational institutions and administration about the European Union's education policy, the Lisbon strategy and the 'Education & Training 2010' work programme on an annual basis. During the autumn of 2005, the Ministry of Education will organise two seminars, the first focusing on the economics of education and related research and the latter covering the significance of education policy co-operation in the European Union and how it affects Finland.

The preparation of EU affairs has been distributed within the Ministry of Education, integrating it into other preparatory work. This aims to guarantee a natural connection

¹⁴ Yrittäjyyden politiikkaohjelma. <http://www.valtioneuvosto.fi>. [Entrepreneurship Policy Programme. English information available at <http://www.valtioneuvosto.fi/vn/liston/base.lsp?r=40232&k=en>.]

¹⁵ Finnish National Board of Education. <http://www.oph.fi/kehittämishankkeet> [Not available in English.]

between national and EU-related work. Stakeholders are closely involved in the preparatory work of Finland's EU affairs. In addition to other ministries, the Ministry of Education sector involves labour market organisations, the Association of Finnish Local and Regional Authorities as well as organisations of principals, teachers and students. Educational institutions and organisations are also actively involved in organising events dealing with educational co-operation within the EU.

2. IMPROVING THE EFFICIENCY OF FINANCING EDUCATION AND TRAINING

Basic education and qualification-oriented education and training at all levels are publicly funded in Finland. Basic education and any initial education or training leading to upper secondary qualifications or higher education degrees are provided free of charge for pupils and students. Comprehensive school pupils receive learning materials, daily meals and school transport free of charge, whereas students at upper secondary level receive free daily meals at school. Funds allocated by the central government to education and training are mainly included under the main title of the Ministry of Education in the State Budget.

In 2005, the funds channelled by the Ministry of Education into education, training and research and student financial aid total about EUR 5,181 million within the State Budget, whereas the estimated municipal contributions to educational services amount to about EUR 3,189 million. The Ministry of Labour finances labour market training to the tune of about EUR 334 million and the Ministry of Social Affairs and Health allocates about EUR 33 million to adult education subsidies and training allowances, while the Ministry of Trade and Industry finances research relating to technology and innovation with about EUR 535 million. The share of the Ministry of Education sector within the State Budget has grown from 14% to 16.3% between 2000 and 2005.¹⁶

The national objectives for development of education and training and their comparison with the objectives of the Education & Training 2010 programme have been presented in Chapter 1 above. This chapter deals exclusively with financing education and training and related development measures.

2.1. Funding systems for education and training

One of the premises of Finnish education policy is that an effective education and training system entails a sufficient level of public funding to guarantee the availability and international competitiveness of high-quality public educational services provided free of charge. Reforms of education and training are primarily financed by developing the public funding system and steering measures.

Financing of basic education, general upper secondary education, initial vocational education and training and polytechnics is divided between the central government and other education providers. State and municipal contributions are regulated by the **system of central government transfers**, which covers operating costs incurred by education

¹⁶ See Appendices, Tables 2 3 and 4.

and training. In addition to their own funding, education providers are entitled to central government transfers to cover the operating costs of their educational institutions. Government transfers to cover operating costs are granted on the basis of calculations. According to law, government transfers cover 57% and municipal contributions 43% of the average costs. The most important factor influencing the amount of the government transfer is the number of students. The unit prices calculated per student are scaled in accordance with factors such as special needs education and fields of vocational education and training. The municipal contribution is determined as a proportion of the educational costs calculated for the entire country for each individual resident of the municipality. Central government transfers are payable to education providers in accordance with the student-specific unit price. Government transfers have not been earmarked for any specific purpose. The calculations-based central government transfer system has been constructed to provide an incentive in that the co-financing share of local authorities and other education providers decreases if their educational costs remain below the average cost level. The funding system for vocational training has been supplemented by financing based on performance since 2002.

Polytechnics receive their core funding from the central government and local authorities. By way of derogation from the general system of central government transfers, the Ministry of Education has agreed, as part of the performance agreements signed with individual local authorities, joint municipal authorities and private providers maintaining polytechnics, that government transfers will be used in full to cover the operating costs of degree-oriented education and adult education programmes. In addition to the core funding, polytechnics receive project funding and performance-based funding in line with their performance agreements. Project funding is allocated to continuing professional education for teaching staff, internationalisation and development of information networks and virtual learning environments. Performance-based funding is based on jointly agreed performance criteria and external evaluations.

University expenditure is financed from the State Budget. The core funding for universities for teaching and research is based on government financing, which is regulated by the Higher Education Development Act (1052/1986). Within the performance agreements, the Ministry of Education allocates core funding to universities for their basic missions, national missions and programmes, as well as project funding and performance-based funding. The amount of core funding is determined on the basis of a core funding formula, which takes account of the scope of education, the number of degrees completed, research activities and the Open University and other societal services. The sufficiency of funding is guaranteed through legislation. Performance-based funding is used to reward the quality and effectiveness of operations, with the main focus being on Centres of Excellence in Education and in Research, which are selected on the basis of quality assessment.

Financing of **adult education and training** provision mainly follows the funding criteria used for initial education or training at the same level. Nevertheless, the funding system for additional vocational training and liberal adult education does not include statutory municipal contributions; instead, funding is mainly based on central government transfers and private contributions. Student fees account for just above 20% and about 10%, respectively, of the funding of liberal adult education institutions and additional vocational training. In additional training financed as in-service training, however, central government transfers account for 50%, whereas the remaining share is covered by employers.

The costs of purchasing **labour market training** are mainly covered from the State Budget. Employers cover some of the costs of training purchased in co-operation with employers. This type of training purchased through joint procurement accounted for 4% of labour market training in 2004. The social benefits payable to unemployed people participating in labour market training are co-financed from the State Budget (65%) and unemployment insurance funds and unemployment funds (35%).

Students receive **financial aid** for full-time post-compulsory studies lasting at least two months. Student financial aid is payable for studies at upper secondary schools, folk high schools, vocational institutions, polytechnics or universities through to the doctorate level. Financial aid is also available for studying abroad. Ordinary student financial aid comprises a study grant, a housing supplement and a government-guaranteed student loan. In addition, an adult education subsidy is granted to mature students. The unemployed receive labour market support or employment subsidy also for training during the unemployment.

Student financial aid is being developed to provide more incentives for studies. The amount of government loan guarantee for higher education students will be raised as from 1st August 2005, while also introducing tax relief on student loans deductible from income tax, which may be granted to those who have completed their higher education degree within the standard timeframe. Other allowances for mature students are vocational examination grants and student grants that agricultural entrepreneurs may receive.

2.1.1. The role of EU financing in development of education and training

Co-financing from the **European Social Fund (ESF)** has been used, in particular, to develop initial vocational and adult education and training, competence of teaching staff and counselling and guidance services for students. Within initial vocational education and training, development measures have focused on young people's on-the-job learning and vocational skills demonstrations, while projects have been launched to improve the flexibility of studies, reduce drop-out rates and promote young people's access to employment. Within continuing vocational education and training, the main targets of development have included upgrading the level of education among middle-aged people without any qualifications, individualisation of adult learning and raising the level of education among teachers. ESF support has also contributed to developing anticipation of educational needs, guidance counselling, careers and recruitment services at educational institutions, as well as vocational education and training for immigrants and their integration into the labour market in order to prevent exclusion. As part of the innovation policy, ESF co-financing has been used to promote areas such as entrepreneurship, research and development and efficient use of new technologies. Furthermore, ESF projects have developed in-service training tailored to meet staff needs and new training methods intended for the working population, such as workplace learning and on-line learning (e-learning). The vocational skills of employed people have been increased through development projects concerning job rotation. In order to develop education and training, projects aim to identify models that would enable a rapid reaction to business enterprises' training needs.

Co-financing from the **European Regional Development Fund (ERDF)** has contributed significantly to investments relating to education, training, research and culture at a regional level. The key themes of ERDF projects falling within the Ministry of Education sector include development of regional expertise and innovation environments and

enhancing information society skills, improvement of R&D environments and promotion of networking in research and working life.

Finnish higher education institutions and vocational institutions actively participate in the **Socrates** and **Leonardo da Vinci** programmes. In particular, these programmes have been used to increase student and teacher exchanges and to support internationalisation of education and training and development projects of education and training and teaching materials. Internationalisation of education and training will be described in further detail in Chapter 6 below.

2.2. Projects to develop financing of education and training

In 2004, the Government initiated **reform of the system of central government transfers to local governments**, which also includes a review of statutes governing financing of municipal educational and cultural services. The Government intends to prepare the reform such that it will guarantee every municipal resident's opportunities to use statutory services at reasonable cost and tax liability. The number of foreign-language pupils in basic education is to be taken into account as a new additional factor in the level of financing, as multiculturalism and numbers of immigrants increase. Other factors with a bearing on financing include the population density, the school network, the number of pupils in grades 7–9, the number of pupils with the most severe intellectual disabilities, the number of special needs pupils, the number of Swedish-speaking pupils, the number of islanders and bilingualism.

In terms of developing the central government transfer system for initial vocational education and training, the aim is to complement the existing funding system with performance-based funding, which is based on quantitative indicators (performance-based funding) and qualitative evaluation (quality award). Performance-based funding aims to support improvement of the quality and effectiveness of education and training and encourage education providers to commit to long-term and goal-oriented development work. Special attention is paid to employment, placement in further studies and reduction of drop-out rates as well as development of teaching staff's competence and formal qualifications. Quality improvement will be discussed separately in Section 5.1 below.

Development of financing for polytechnics aims to support speedy graduation and reduce drop-out rates by also taking educational performance, the number of degrees completed and R&D work in support of regional development into account in addition to student numbers.

The Ministry of Education has drawn up a **Productivity Programme** for 2005–2009, which aims to support measures to promote productivity and efficiency, preparation of the annual State Budget, management by results and improvement of the productivity of publicly funded activities. The programme includes projects to increase completion rates of education and training (upper secondary level and higher education institutions), to reduce drop-out rates in post-compulsory education and training, to increase recognition of competence, to speed up transition to further studies, to promote regional and structural development and to develop compilation of productivity statistics.

The efficiency and performance of education and training are also enhanced by reducing multiple education and training. As a general rule, people who have already completed a

post-compulsory qualification or degree will be directed to appropriate adult education and training programmes, in order to speed up their transition to further studies, on the one hand, and to shorten the length of their studies, on the other.

Decentralisation of decision-making powers. Structural reform of educational administration, i.e. decentralisation of decision-making powers, was mainly implemented in Finland back in the 1990's, when the funding system shifted to unit-based funding criteria and the curricular system was reformed. Unit-based funding criteria give education providers freedom to allocate public funding as they see fit, as long as statutory minimum requirements for the amount of instruction, guidance counselling, pupil/student welfare services, special needs education, etc. are fulfilled. In the current curricular system, the National Board of Education draws up binding National Core Curricula, which determine the objectives and assessment criteria for education and training, while the more specific curricula observed at schools are prepared locally.

Tax relief. Businesses are entitled to deduct any donations they make to higher education institutions from their taxes and the costs of their own in-service training are deducted from income when calculating their taxable income; in certain cases, private individuals are also entitled to deduct education and training costs from their tax liability.

In early 2005, the Government made a proposal to revise financial aid for higher education students such that those completing their degrees within the standard time would be granted tax relief upon graduation.

Expanding the funding base for education and research. Providers of all forms of education and training may acquire additional funding through provision of commercial services by selling education, training, research or other services to public administration, private companies or individuals. In basic education and general upper secondary education, commercial services account for an infinitesimal share of funding. Commercial services account for about 26% and 12%, respectively, of the total funding of upper secondary VET providers and polytechnics¹⁷.

Actual budgetary funding and external funding account for 65% and 35%, respectively, of universities' total funding. In 2003, more than half (61%) of external funding was used for research purposes. The most significant external funding sources are the Academy of Finland (18%), domestic companies (16%), the Technology Development Centre of Finland (13%) and European and national contributions through the EU's Structural Funds projects (40%).¹⁸

Investment by companies and employers in education and training also plays a significant role in terms of the entire national economy. In 2002, investments in in-service training among member companies of the Confederation of Finnish Industry and Employers (TT) and the Employers' Confederation of Service Industries in Finland (PT) amounted to about EUR 495 million and about EUR 257 million respectively¹⁹. The central

¹⁷ Appendices, Table 5A.

¹⁸ See Appendices, Table 5B.

The proportions of commercial services in the total costs of different forms of education and training are shown in Table 5A in the Appendices.

¹⁹ TT: Osaamistarveluotain (2003); PT: Palvelutyöntäjien koulutusselvitys (2003). [TT (2003): Skills needs probe. *Not available in English*. PT (2003): Educational needs survey of the Employers'

government spent about EUR 77.5 million on staff training in 2003²⁰, whereas equivalent investment from the local authorities stood at EUR 125.5 million in 2000²¹.

2.3. Monitoring and evaluation of education policy

Monitoring tools. *Statistics Finland* is a key producer of basic information required in monitoring and development of the education and training system. The Ministry of Education agrees with Statistics Finland, the National Board of Education and the Academy of Finland on production of statistics and other monitoring data. *The Ministry of Education* also maintains statistical databases describing the operations of universities (*KOTA database*) and polytechnics (*AMKOTA database*), which contain data arranged by higher education institution and field of education. These databases have been designed as a management aid for use by the Ministry of Education and higher education institutions to produce the basic data they need for annual planning and monitoring. The Ministry of Education maintains the information system of authorisations to provide initial vocational education and training (*KOUTE*), used by the Ministry to make decisions on granting authorisation to provide initial vocational education and training. *The National Board of Education* maintains the funding systems of educational institutions providing basic education, general upper secondary education, initial vocational education and training, continuing vocational education and training and liberal adult education, produces development surveys and estimates of funding systems and attends to statistical services. *The Ministry of Labour* maintains information systems concerning implementation and effectiveness of labour market training.

Evaluation of education and training. The purpose of the evaluation of education and training is to guarantee achievement of the objectives laid down in legislation governing education and training, to support development of education and training and to improve the prerequisites of learning. The Ministry of Education receives support for evaluation activities from two evaluation councils operating in conjunction with the Ministry. *The Finnish Higher Education Evaluation Council (FINHEEC)* is an independent expert body responsible for helping higher education institutions and the Ministry of Education to evaluate higher education institutions. *The Finnish Education Evaluation Council* operates in conjunction with the Ministry of Education as the expert body in evaluating general education and vocational and adult education and training. *The National Board of Education* is a key producer of evaluation information concerning learning outcomes.

At a regional level, *the State Provincial Offices* evaluate the availability and quality of basic services in education and training. *Education providers* at all levels of education have the statutory duty to evaluate the instruction that they provide and its effectiveness and to participate in external evaluation of their operations. The key results of evaluations must be made public.

Confederation of Service Industries in Finland 2003. *Not available in English.*] The figures include wages and salaries paid for the period of training and related indirect employee costs.

²⁰ Ministry of Finance.

²¹ Statistics Finland.

Student feedback systems. The Ministry of Labour monitors the quality of labour market training through its own student feedback system (OPAL). The Ministry of Education is preparing to develop an equivalent system for continuing vocational education and training provided under its auspices. The polytechnics and the Ministry of Education have a joint and compatible student feedback collection system (OPALA), which is used to plan and evaluate education and training and develop education, training and practical training periods.

The quality assurance system of higher education institutions will be presented in Section 4.5 below.

3. IMPLEMENTATION OF THE LIFELONG LEARNING STRATEGY

3.1. National definition and key objectives of lifelong learning

Lifelong learning has been defined in Finland as an approach that steers education policy and other policy sectors relating to learning. The objective is to achieve a high level of education and good learning skills that will thus create conditions for people to continuously learn new things for different purposes, and to give people the opportunity to maintain and develop their competencies at all ages, making use of different environments. The objectives of lifelong learning have been included in Finland in the Development Plan for Education and Research and other Government strategy documents. It has not been considered necessary to create a specific strategy for lifelong learning. The following passages describe the objectives set at national level and their achievement to date.

Raising the population's level of education. In the Development Plan for Education and Research²², the Government set the following objectives for raising the population's level of education:

1. Access to pre-primary education will be guaranteed throughout the country. The participation rate in 2004 was 96%.
2. By 2015 at least 90% of the 25–29 age group have completed general upper secondary school or initial vocational education and training. This proportion was 86% in 2003.
3. By 2015 at least 50% of the 30–34 age group have completed a higher education degree. This proportion was 42% in 2003.
4. The proportion of education and/or training leading to initial vocational qualifications, polytechnic degrees and university Bachelor's and Master's degrees specifically provided for adults will account for about 20% of the total number of new students. This objective has practically been achieved.

²² Koulutus ja tutkimus 2003-2008. Kehittämissuunnitelma. Opetusministeriön julkaisu 2004:6. Yliopistopaino, Helsinki 2004. <http://www.minedu.fi/julkaisut/index.html>. [*Available in English: Education and Research 2003–2008. Development Plan. Publications of the Ministry of Education 2004:8. Helsinki University Press 2004. <http://www.minedu.fi/publications/index.html>.]*]

Learning skills. One of the objectives set by the Government in the Development Plan for Education and Research for development of instruction and learning environments is that these will provide individuals with a solid foundation for lifelong learning. This has been taken into account in the National Core Curricula for basic education, initial vocational education and training, general upper secondary education and in teacher education.

Maintenance and development of competence. One of the objectives set by the Government in the 2005 Budget is for the proportion of the working-age adult population participating in education or training to increase to 60% by 2008²³. This proportion was 54% in 2000. Adult education and training will be promoted such that self-motivated adult education and training, labour market training and in-service training will form an effective whole.

3.2. European objectives and Finnish education policy

In its Resolution on lifelong learning (2002/C 163/01, adopted on 27th June 2002), the EU Council invites the Member States within the framework of their responsibilities:

(1) *to develop comprehensive and coherent strategies for lifelong learning;*

In Finland, the objectives of lifelong learning are included in the Development Plan for Education and Research and in the Government's other strategy documents.

(2) *to mobilise resources for such strategies;*

In Finland, the resources required to achieve the objectives are allocated within the framework of the normal funding system or by developing the funding system through the State Budget (see Chapter 2 above).

(3) *to promote learning at the workplace;*

In Finland, learning in the workplace has been developed in young people's initial vocational education and training, in particular, where at least six months of on-the-job learning have been included in all study programmes as from the year 2000. Apprenticeship training has expanded as a form of both initial vocational education and training and additional vocational training. Learning in the workplace is being further developed in the Noste Programme for raising the level of education among adults (see Section 5.1.1) and in ESF projects, for example.

(4) *to improve the education and training of teachers and trainers;*

In 2001, the Ministry of Education launched the Teacher Education Development Programme²⁴ with priorities focusing on development of student selection procedures and pedagogical studies, co-operation between teacher education and training units, continuing professional education for teachers and teacher trainers and quantitative expansion of teacher education and training. Implementation of the programme will be evaluated this year.

(5) *to take measures to validate learning outcomes;*

Recognition of previously acquired competence is specifically carried out in Finland within the system of vocational competence-based qualifications

²³ Government's Budget Proposal for 2005.

²⁴ Opettajankoulutuksen kehittämissuunnitelma 2001–2005. [Teacher Education Development Programme 2001–2005. Summary available in English at www.minedu.fi/julkaisut/OPEKO/opekoeng.pdf.]

intended for adults, which covers all secondary level vocational qualifications and vocational and specialist qualifications that indicate skills developed in working life. In regular initial vocational education and training, previously acquired competence conforming to the curriculum is recognised as being part of the studies. Polytechnics and universities are currently carrying out projects to develop recognition of competence.

(6) *to develop guidance and advice;*

As part of the Government's Employment Policy Programme²⁵, the National Board of Education has launched a development project for guidance counselling²⁶, which aims to develop counselling and guidance services of educational institutions providing basic education, general upper secondary education, initial vocational education and training and non-tertiary adult education and training and to support in-service training for staff. The project is being implemented between 2003 and 2007. At polytechnics and universities, guidance counselling is developed as part of the measures launched to raise the completion rate of studies. The Ministry of Education has developed the 'Opintoluotsi' portal to provide citizens with educational information and advice in a project co-funded by the ESF²⁷. The Ministry of Labour has initiated a project to improve guidance and motivation of adults to education and training (AIKOO project), which is related to the strategic objective of guaranteeing the availability of skilled labour. The aim is to help adults without initial vocational qualifications and other clients who would benefit from supplementary training to find suitable education or training options and increase their participation in education and training.

(7) *to improve the position of groups with low basic skill levels;*

Within basic education, special attention is paid to identification of and early intervention in learning difficulties. Provision of remedial instruction and special needs education will be increased in order to improve the learning outcomes of children with learning difficulties. Additional basic education (a voluntary extra year after 9-year comprehensive school) aims to raise the level of competence among those pupils who do not apply for or get into upper secondary education or training. Additional education is to be developed such that it can be organised in conjunction with vocational institutions as a form of education geared to orienting young people to vocational education and training and preventing dropping out. The Ministry of Education has launched several projects to reduce drop-out rates in post-comprehensive school education and training. In addition to developing counselling and guidance, the Ministry of Education has also initiated an Action Programme for Vocational Special Needs Education and Training²⁸. Indeed, drop-out rates in post-compulsory education and training have gradually decreased in Finland between 2001 and 2004²⁹.

The five-year (2003–2007) Noste³⁰ Programme launched by the Government to raise adults' level of education will be described in more

²⁵ Työllisyyden politiikkaohjelma. <http://www.valtionuuvosto.fi/>. [Employment Policy Programme. English information available at <http://www.valtionuuvosto.fi/vn/liston/base.lsp?r=40232&k=en>.]

²⁶ National Board of Education. <http://www.oph.fi/kehittämishankkeet> [Not available in English.]

²⁷ <http://www.opintoluotsi.fi> [Information available in English.]

²⁸ Ammatillisen erityisopetuksen toimenpideohjelma. [Action Programme for Vocational Special Needs Education and Training. Not available in English.]

²⁹ See Appendices, Table 7.

³⁰ The Finnish word 'noste' translates as 'lifting'.

detail in Section 5.1.1 below. Labour market training (number of new students just below 80,000) mainly focuses on improving unemployed people's vocational skills. A considerable proportion of this training aims at completion of vocational qualifications or their individual modules. The training may also include general education necessary in terms of future employment opportunities. The Government intends to direct more labour market training at the working population as well, in order to extend careers.

(8) *to improve participation in learning.*

Measures to raise the level of education and participation in adult education and training have already been discussed above.

3.3. National co-operation in the field of lifelong learning

At the beginning of 2005, the Government appointed a new body, the Council for Labour and Educational Affairs operating as a joint expert body of the Ministries of Labour and Education. Its role is to deal with key employment policy challenges and strategies as well as those education policy challenges and strategies relevant to working life. The Council is co-chaired by the Ministers of Labour and Education. The members mainly represent labour market organisations, key ministries and local authorities.

The Adult Education Council, appointed by the Government, is an expert body in adult education and training operating in conjunction with the Ministry of Education. The Council is made up of representatives from different sectors of adult education and training, political parties and labour market organisations. Its role is to make initiatives and proposals to develop adult education and training and to monitor national and international developments and research in the field.

Vocationally or professionally differentiated education and training is planned and developed in co-operation with labour market organisations in a variety of national and local bodies and through more informal interaction. Different forms of co-operation in vocational education and training will be discussed in more detail in Section 5.4 below.

4. REFORM OF HIGHER EDUCATION

In all, there are 20 universities and 29 polytechnics operating under the auspices of the Ministry of Education. In addition, the National Defence College (university) and the Police College (polytechnic) fall within the administrative sectors of the Ministry of Defence and the Ministry of the Interior respectively. The Ministry of Education steers the universities and polytechnics by means of three-year performance agreements.

All twenty Finnish universities are state-owned public institutions governed by the Universities Act (645/1997). In addition, the autonomy of universities has been provided in the Constitution of Finland. Polytechnics are maintained by local authorities, joint municipal authorities or private organisations. Polytechnics enjoy internal autonomy. Private polytechnics are governed by the same legislation as publicly funded polytechnics.

University autonomy covers full independence in education, research, internal administration, staff matters and student selection. Universities are also free to acquire external funding, but they are not allowed to charge tuition fees. According to the Universities Act, all degree-oriented higher education is provided free of charge in Finland. In order for education to meet the needs of society and working life, the Government decides on the fields of degrees offered by individual universities. For the same reason, the Ministry of Education decides on polytechnic degree programmes. Higher education institutions are responsible for devising their own curricula and degree programmes.

Both sectors of higher education have a public funding system based on performance agreements, which enables funding levels for higher education institutions to be predicted. Since appropriations are granted as lump sum payments, the practice gives some independence to institutional administration and management in internal distribution of funds. The formula applied is different for universities and polytechnics in order to distinguish between their different functions and orientations.

4.1. Compatibility of the degree structure at the European level

The Universities Act was amended in July 2004. This reform laid down a two-cycle degree system compatible with the Bologna process, which includes a mandatory Bachelor-level degree prior to a Master's degree in all fields except Medicine and Dentistry. The new amendment (Act 715/2004) provides universities with the opportunity to confer official English-language degrees and degree titles.

The Government Decree on University Degrees (749/2004) was issued in August 2004 to specify the Universities Act. It repeals the previous 20 field-specific decrees, detailing the two-cycle degree structure and issuing the aims and structures of lower (Bachelor's) and higher (Master's) university degrees and doctorate degrees. In addition, the European Credit Transfer System (ECTS) was also adopted as part of the same reform. The Act and Decree will come into force in August 2005, when all new university students will start their studies on reformed programmes.

The most recent amendment to the Polytechnics Act (351/2003) was made in May 2003. During the spring of 2005, Parliament is due to consider a Government Bill to amend the Act such that postgraduate polytechnic degrees, which were piloted between 2000 and 2005, will be introduced as higher polytechnic degrees, thus establishing a second cycle of polytechnic degrees as well. When the reform proposed by the Government enters into force, the polytechnic degree structure will be based on permanent legislation. It is very likely that Parliament will pass the Bill and that the amendment to the Polytechnics Act will also become effective in August 2005. The Government Decree on Polytechnics (352/2003) was amended in 2004, issuing provisions on the ECTS system for polytechnics, and it came into force on 1st January 2005.

Finnish education policy has emphasised the quality of education and degrees in the reform establishing degrees compatible with the Bologna process. The Ministry of Education has allocated supplementary aid to all universities in order to support the transition to the new system. The Ministry is also keeping a close eye on the process.

The cornerstone of the recent national higher education reforms has been the internationalisation of Finnish higher education³¹. The new legislation also takes the new forms of international co-operation into account; the new Government Decree on University Degrees (794/2004) states as follows: 'Education leading to a higher education degree may also be arranged in international cooperation.' Besides a Finnish- or Swedish-language degree title, any degree completed in a language other than Finnish or Swedish will also be given an English degree title. Degree titles are enumerated in Decree 794/2004. The English titles of polytechnic degrees have been confirmed by the Ministry of Education.

In order to consolidate the creation of a genuine European dimension in all higher education, the Ministry of Education prepared a Recommendation for Development of International Joint Degrees and Double Degrees in co-operation with higher education institutions, the Finnish Higher Education Evaluation Council, student organisations and the Finnish ENIC/NARIC Centre, i.e. the National Board of Education. The recommendation has been broadly disseminated, while also organising seminars and training. In addition, the Centre for International Mobility (CIMO) and the National Board of Education have provided advice on the topic. No detailed information has been collected, but it appears that the Ministry of Education Recommendation has been observed. However, because the Recommendation is not very specific, there are variations in practical arrangements of the degree programmes. According to information obtained by the Ministry of Education, the CIMO and the National Board of Education, almost all educational units have developed or planned to develop such programmes. Finnish higher education institutions have also been actively involved and successful in applying to participate in consortia offering Erasmus Mundus Masters courses.

4.2. Competitiveness and attractiveness of European higher education

Finland has actively contributed to setting up the European Higher Education Area. Finnish higher education institutions are members of European networks primarily aiming to attract talented students to study at European higher education institutions. Quality assurance criteria and methods are being developed on a European level in order to enhance the quality of European education.

4.3. Postgraduate studies and innovations

Universities and polytechnics form an important part of the national innovation system. Universities are responsible for the majority of fundamental research carried out in the country, while the role of polytechnics in applied research and development activities is growing steadily. A considerable part of research and development is carried out by means of external funding. All higher education institutions have systematically developed co-operation with business and industry. In order to ensure co-operation with and transfer of knowledge within society, this was added as an obligation to the Universities Act in 2004. The share of higher education institutions in publicly funded research and total research funding is about 59.0% and about 19.5% respectively (2003).

³¹ See Appendices, Tables 8–10.

In 2004, public research funding and total research funding accounted for about 1.0% and about 3.5% respectively of the gross domestic product.

A Master's degree confers eligibility for postgraduate studies. Universities are responsible for admission requirements to third-cycle studies. Doctoral studies usually take four years of full-time study, including the doctoral thesis. The majority of postgraduate studies are traditionally carried out independently, but the number of organised courses has been increasing. The graduate school system was created in 1995 and has grown rapidly. At present, there are about 4,500 postgraduate students at graduate schools. The figure covers most postgraduate students who are studying actively.

4.4. Structural reform of universities

Universities have reformed their internal administrations and structures in order to reflect the new requirements set for their operations. Departments have been merged to create stronger research capacity. This also enables creation of new multi- and inter-disciplinary degree programmes. A major study was carried out in 2003 on the change needs of the higher education systems and implementation of the proposed measures started in 2004. The purpose of structural reforms is to consolidate the role of research at universities and to improve the quality of both education and research in higher education. The intention is not to increase the quantity of higher education units but, on the contrary, to excel in terms of quality.

4.5. Quality assurance

The national quality assurance system for higher education consists of three elements: national higher education policy, national external evaluations and the internal quality assurance systems of individual higher education institutions.

National higher education policy. Publicly funded higher education institutions are steered by the Ministry of Education. The Universities Act includes provisions on the universities' mission and degrees, whereas the Government Decree on University Degrees contains more specific provisions on degrees in each branch of study. Correspondingly, the Polytechnics Act and Decree determine the status of polytechnics within the education and training system, as well as their educational provision, degrees and evaluation. The performance of universities and polytechnics is monitored as part of annual performance negotiations with the Ministry of Education.

National external evaluations. The Finnish Higher Education Evaluation Council is responsible for evaluating the quality of education and other activities in higher education institutions. To date, the Council has organised institutional, programme and thematic evaluations, quality audits and accreditations of polytechnic education and selected high-quality units known as Centres of Excellence both at universities and polytechnics. The Finnish Higher Education Evaluation Council has also started to audit quality assurance systems within universities and polytechnics. The Academy of Finland is responsible for reviews of national research systems, evaluations of scientific disciplines, peer evaluations of project proposals and evaluations of the impacts of research programmes.

Internal quality assurance systems within higher education institutions. Higher education institutions are responsible for the quality of their operations. Universities and polytechnics are currently developing internal quality assurance systems for education, research as well as societal services. According to higher education legislation, higher education institutions are required to participate in external national evaluations. So far, every university has been evaluated institutionally and most universities have also taken part in follow-up evaluations. The Finnish Higher Education Evaluation Council officially accredited all polytechnics when they were established in the 1990's. In addition to these institutional evaluations, every higher education institution has also participated in other types of evaluation. In most cases, international experts have been used in external evaluations of both sectors.

Following on from consultations with universities and polytechnics, the Finnish Higher Education Evaluation Council has started to audit the quality assurance systems of higher education institutions. This approach was chosen, because the audit system is seen to promote the independence and diversity of higher education institutions and to be a flexible evaluation tool showing confidence in the institutions' own operations. Audits aim to evaluate how each higher education institution's quality assurance system works as a quality management and improvement tool. In addition, they aim to support development of the higher education institution by providing feedback on the strengths and development challenges of the quality assurance system and to prove, through the description and evaluation of the system, its effectiveness and reliability to the institution's co-operation partners as well.

4.6. Lifelong learning at higher education institutions

The Development Plan for Education and Research focuses on development of lifelong learning. The Open University and the Open Polytechnic are being developed and measures are being taken to enhance their regional coverage. At the same time, the aim is to promote adult education and postgraduate education by developing the degree system. The Ministry of Education grants supplementary funding to support creation of open and virtual learning environments. By virtue of law amendments effective since 2003 (Act 1295/2002 and Government Decree 1344/2002), employment authorities also have the opportunity to provide funding for unemployed people who have dropped out of studies to complete their higher education degrees.

Following on from university and polytechnic legislation, a higher education institution may also admit applicants not satisfying formal eligibility requirements, if it can ascertain such students' eligibility in some other way. The greatest change to operational policy is included in the new legislation governing degrees, which facilitates accreditation of previous studies and even learning acquired in working life.

5. IMPROVING THE QUALITY AND ATTRACTIVENESS OF VOCATIONAL EDUCATION AND TRAINING

Measures relating to the Copenhagen process in Finland are driven by a Steering Group appointed by the Ministry of Education, which is made up of representatives from the

Ministry of Education, the Ministry of Labour, the National Board of Education, VET providers and labour market, teacher and student organisations. The Steering Group functions as the preparatory and co-ordinating body of the process. It also steers utilisation of the results of the Copenhagen process in development of Finnish vocational education and training.

5.1. Implementation of the Copenhagen process at a national level

Europass. For several years now, the international mobility of Finnish vocational students has been promoted by means of Europass. The National Board of Education functions as the National Europass Centre. Europass documents are currently in use in Finland: Certificate Supplements to vocational qualification certificates for international use are available in electronic format on the National Board of Education website, while higher education institutions use Diploma Supplements.

Mobility. The mobility of vocational students has increased in Finland slowly. About 3% of students go abroad every year on a study visit or a period of study or on-the-job learning. In 2004, about 4,000 VET students were studying or training abroad. Student exchanges will be explained in more detail in Section 6.1 below.

Quality assurance in vocational education and training. Initial vocational qualifications can be completed in the form of curricular (school-based) education and training, apprenticeship training or competence-based qualifications. The quality and effectiveness of vocational education and training are based on the National Core Curricula and the Requirements of Competence-based Qualifications drawn up by the National Board of Education in co-operation with the world of work. In 2006, new vocational skills demonstrations will be introduced to curricular education and training. Vocational skills demonstrations have been developed since 2000 in order to assure the quality of vocational qualifications. In skills demonstrations, students perform practical work assignments in order to show that they have achieved the vocational skills required in working life.

Quality improvement is also supported by supplementing the current funding system with performance-based funding, which also includes qualitative evaluation. Quality Awards are granted with a view to encouraging VET providers to engage in continuous quality assessment and improvement. The assessment criteria for the Quality Award are based on the EFQM Excellence Model and the European Union's Common Quality Assurance Framework (CQAF) for vocational education and training. Other means to support quality management in and development of vocational education and training include evaluations, quality management recommendations and quality improvement projects.

Recognition of competence. Previously acquired competence may be accredited in initial vocational education and training, provided that it conforms to curricular objectives.

The competence-based qualifications system, in turn, consists of qualifications intended for adults, where vocational skills are demonstrated in competence-based tests independent of the way in which the skills were acquired. In addition to initial vocational

qualifications, the competence-based qualifications system also includes further and specialist qualifications that support vocational development.

Guidance counselling. All initial vocational qualifications include 1.5 credits of guidance counselling. Guidance counselling is a key part of Finnish vocational education and training, aiming to promote completion of studies and students' placement on the labour market and in further education. Based on evaluations, development measures have focused in particular on development of counselling and guidance services at educational institutions and support for continuing professional education for staff. See Section 3.2 above.

The role of the labour administration is to organise vocational guidance services. Co-operation between educational and labour administrations has been developed as part of the educational and social guarantee for young people, which aims to secure an upper secondary level study place for everyone upon completion of basic education. The main focus has been on measures supporting the transition from basic education to upper secondary level.

5.2. Prevention of social exclusion

In 2004, the proportions of comprehensive school-leavers continuing their studies during the same year in vocational education and training, general upper secondary education or additional basic education were 37%, 55.1% and 2.4% respectively. Various transitional measures have been taken with a view to promoting young people's transition from basic education to upper secondary level. Guidance counselling has been directed in particular at the final stage of basic education (see Guidance counselling in Section 5.1. above). Co-operation between vocational institutions and comprehensive schools has been promoted by means of ESF projects, for example.

The Youth Participation Project, co-funded by central and local governments, aims to prevent young people's exclusion and its objective is to guarantee every young person a further study place or some other sensible option to help them build their own lives. The project is a cross-administrative co-operation project involving parties such as educational institutions, municipal youth and sports services, municipal social and health care services, employment authorities, non-governmental organisations and parishes. The project covers more than 70 municipalities.

5.2.1. The Noste Programme to raise the level of education among adults

In 2003, the Government launched a programme to raise the level of education among adults for 2003–2007, entitled the Noste Programme, which provides mostly employed 30–59-year-old people lacking upper secondary education with opportunities to complete initial vocational qualifications and improve their information society skills free of charge. The programme aims to prepare for the shortage of skilled labour due to the attrition of the baby boomers and to raise the population's level of education. Those participating in the programme may complete initial, further or specialist vocational qualifications or individual qualification modules or obtain a Computer Driving Licence. The Noste Programme also finances support measures for studies and outreach activities. Support measures for studies entail guidance in and individualisation of studies. Outreach activities mean information about education and training and individual guidance provided in locations such as workplaces.

During 2003–2004, about 7,200 people started education or training within the Noste Programme. To date, about 1,300 people have completed full vocational qualifications (an initial, further or specialist vocational qualification), while about 1,100 participants have completed individual qualification modules. In addition, education and training funded through normal channels have also been directed at the programme's target group. Another 11,000–12,000 people in this target group were also studying in regular core-funded vocational education and training provided under the auspices of the educational administration in 2004. The total funding reserved for the programme in the 2005 State Budget amounts to EUR 26 million. In 2003–2004, just below 17,000 of those who started labour market training could be classified as belonging to one of the Noste Programme target groups.

5.2.2. Education and training for immigrants

Finland aims to guarantee immigrants equal status with native Finns in the use of educational services and social benefits for students. The selection criteria and funding system for education and training do not place any barriers to admitting foreign nationals or immigrant students to vocational education and training. The objectives of vocational education and training for immigrant students are the same as for other students. The needs of immigrants studying for initial vocational qualifications have also been taken into account in the National Core Curricula for different VET fields, educational arrangements and assessment of performance. Local curricula must also include a plan to provide education for immigrant students. Those students whose native language is other than the school's language of instruction are supported in language studies in particular and, where necessary, using special educational arrangements – foreign language studies may also be their own native language. The learning outcomes of immigrant students and other students belonging to different language and cultural groups are assessed in the same manner as those of other students, but assessment must be carried out in such a way that any possible deficiencies in language skills will not have an adverse effect on grades.

In addition, immigrants are provided with pre-vocational preparatory education with a scope of 20–40 credits (6–12 months). The objective of this education is to provide students with linguistic and other capabilities to move on to vocational studies. The education is based on individual study plans. The objectives specified in this area include enhancing immigrant students' placement in initial vocational education and training upon completion of preparatory education and improving their opportunities to participate in apprenticeship training. The aim is to reduce immigrant students' drop-out rates from vocational education and training by means of remedial instruction and support staff arrangements and through instruction in their own native languages.

5.3. Attractiveness of vocational education and training

The number of applicants for vocational education and training is clearly higher than the number actually admitted every year. In average terms, for every student admitted to vocational programmes in 2004, there were about 1.3 primary applicants. The most popular fields were Health Care and Social Services, Culture, and Leisure and Physical Education, each of which had at least two primary applicants per student admitted. In certain subfields, however, such as Machinery and Metal Technology and Cleaning Services, the number of applicants remains below the educational needs estimated on the basis of demand in working life. The situation used to be similar in Heating, Plumbing

and Ventilation Technology and Restaurant Services, but applicant numbers have grown in recent years.

2005 has been declared the National Year of Vocational Skills in Finland. This theme year is being organised by the Ministry of Education and the National Board of Education. During the year, vocational education and training and the significance of vocational competence will be promoted through various actions and events organised in co-operation with VET providers, educational institutions and the world of work and business. The theme year aims to publicise the practical and diverse nature of vocational education and training, its reforms and opportunities for further study. Another objective is to increase information about different occupations and programmes leading to these. The target group includes young people in particular. The main event of the theme year, the WorldSkills Competition, will be organised in Helsinki from 25th May to 1st June 2005.

5.4. Links between VET and working life

National Education and Training Committees. The National Education and Training Committees for different fields (33) and the National Co-ordination Group for Education and Training operate under the auspices of the Ministry of Education as expert bodies in the development of initial and additional vocational education and training, polytechnic studies and professionally oriented education provided by universities. Their role is to promote interaction between education and working life in co-operation with the Ministry of Education and the National Board of Education. Committee members must represent at least educational administration, teachers, employers and employees. National Education and Training Committees deal with matters such as the National Core Curricula and the Requirements of Competence-based Qualifications. Members of the National Co-ordination Group for Education and Training include the chairs of the National Education and Training Committees and representatives of the central organisations of employers and employees. The role of the National Co-ordination Group is to discuss extensive issues crossing the boundaries of individual VET fields.

Qualification Committees are select bodies appointed by the National Board of Education, representing employers, employees, teachers and self-employed people. Their roles include managing organisation of competence tests and signing qualification certificates. There are one or more Qualification Committees for each initial, further and specialist vocational qualification, totalling more than 300 qualifications.

Local co-operation bodies. Almost all educational institutions have local advisory councils consisting of social partners. Achievement of vocational skills is ensured through vocational skills demonstrations given in practical work assignments, which are assessed in co-operation between the education provider and representatives of working life. Each education provider appoints a body for the purposes of implementing vocational skills demonstrations or assigns this task to the above-mentioned local advisory council. This body is made up of representatives of the education provider, teachers, the world of work and business and students. The body plans and supervises skills demonstration activities.

5.5. Development of competence among the ageing labour force

See section 5.2.1 above (The Noste Programme to raise the level of education among adults, page 24).

5.6. Lowering the barriers between VET and general and higher education

All initial vocational qualifications last three years and provide general eligibility for further studies at polytechnics and universities. At present, about 30% of new polytechnic students have progressed through the vocational track, whereas the equivalent figure for universities is about 5%.

Upper secondary studies may also be taken in parallel at a general upper secondary school and at a vocational institution, either such that a vocational student chooses general upper secondary school studies, for example to enhance his or her capabilities for further study, or that an upper secondary school student supplements his or her upper secondary school studies with vocational studies. Students may also complete two qualifications at the same time; the most common combination is a initial vocational qualification and the general upper secondary school matriculation examination. About 5% of students completing an initial vocational qualification take the matriculation examination at the same time.

5.7. Developing the competences of VET teaching staff

Teachers at vocational institutions are required to hold a higher university degree or an appropriate polytechnic degree, to have completed pedagogical studies with a scope of no less than 35 credits and to have at least three years of work experience in a field relevant to the assignment. Teachers maintain and develop their competence by means of continuing professional education and practical placement periods in the vocational field that they teach. Several national continuing education projects for vocational teachers are underway in Finland. The priorities specified in the Development Plan for Research and Education for teacher education and training include guidance counselling and special needs education.

TUKEVA is a programme aiming to raise the level of education among VET teachers and to develop the operations of adult education organisations and new learning environments. The project involves a total of about 450 teachers, who aim to complete a higher university degree or a Licentiate's or Doctor's degree in educational, economic or technological sciences. **KOKEVA** is a development programme for initial vocational education and training with key objectives of developing, maintaining and updating vocational competence of upper secondary VET teachers and instructors and promoting well-being at work. The project involves about 700 teachers and 86 organisations. **AiHe** is a development project to individualise adult education and training, aiming to improve education providers' expertise in meeting the individual competence needs of the working-age population and making use of previous learning. The project develops forms of provision based on individualisation and co-operation between education providers and businesses. The project involves more than 50 continuing vocational education institutions.

5.8. Anticipation of labour and educational needs

Anticipation of labour and educational needs is based on extensive co-operation between different parties, involving different ministries, the National Board of Education, provinces, Regional Councils, Employment and Economic Development Centres, education providers and higher education institutions. The most important anticipation tasks include preparation of forecasts concerning economic trends and employment rates, anticipation of developments in the occupational structure of the labour force, as well as estimation of medium- and long-term supply of and demand for labour. The tasks also include anticipation of national and regional intake needs.

Anticipation is based on the Labour Force Model, which is derived from the Ministry of Labour's labour force forecast by sector. Demand for new labour is made up of the sum of the change in the number of employed people and attrition. The process is implemented in co-operation between different administrative sectors and regions. The National Board of Education is responsible for anticipation in terms of educational needs. The Ministry of Education makes use of forecast data produced by the National Board of Education when preparing the periodical Development Plans for Education and Research. Regions draw up their own forecasts for educational needs, based on national forecasts and their own projections. The information provided by forecasts is used in areas such as regional strategic planning and the steering policies of the Ministries of Education and Labour.

6. THE EUROPEAN DIMENSION OF EDUCATION

6.1. Increasing mobility

The objectives of the Ministry of Education sector for promoting mobility are included in the Development Plan for Education and Research. No specific national strategy has been drawn up for promoting mobility and removing obstacles to mobility. Nevertheless, promoting mobility and removing obstacles to it have emerged as an important theme of education policy in recent years.

In its Development Plan, the Government has set the following objectives concerning internationalisation and promotion of mobility at all levels of education:

- A strategy will be devised concerning priorities in international educational co-operation. The growing importance of international co-operation and increasing multiculturalism in Finnish society will be taken into account in development of educational content. New learning materials will be produced for international education.
- The internationalisation of vocational education and training will be supported through development of curricula and teaching and through promotion of international co-operation. The prerequisites for the mobility of initial vocational students and qualification-holders will be improved, periods of study and on-the-job learning abroad will be increased and supply of foreign-language teaching will be promoted.
- By the end of the present decade, 8,000 polytechnic students and 6,000 university students will study part of their degrees abroad each year and a corresponding number of exchange students will study in Finland.

- Polytechnics and universities will increase the number of foreign students to the extent that there will be a total of 12,000 foreign degree students in Finland in 2008. With this in mind, higher education institutions will arrange foreign-language programmes and courses according to their own specific profiles.

Table 12 in the Appendices describes the participation of Finns in the Socrates and Leonardo da Vinci programmes in 2003 and 2004.

6.1.1. Removing legal and administrative obstacles to mobility

Under the Finnish student financial aid system, Finnish student financial aid may also be granted for studies taken abroad, as long as these correspond to Finnish studies eligible for aid or are included as part of a qualification or degree being completed in Finland. In addition, citizens of EU or EEA countries or Switzerland are also entitled to receive student financial aid in certain circumstances.

Provisions on visas and residence permits have been perceived as creating an obstacle to entry into Finland for some students studying for a qualification or degree. The Ministry of the Interior is currently preparing a Bill aiming to simplify students' immigration and residence legislation. In addition, the Government is currently preparing a national immigration programme, paying particular attention to students in higher education.

According to the interpretation of the Social Insurance Institution, grants awarded within the Leonardo da Vinci programme, or other equivalent allowances aiming to support transnational placements as part of education or training programmes, will not be considered as forming part of a student's income when considering the award of student financial aid and will not therefore reduce the amount of aid granted to the student.

6.1.2. Measures to improve the quality of mobility

Finland has not prepared a specific plan for improving the quality of mobility. However, the following objectives and measures may be considered to promote the quality of mobility at least indirectly.

According to the Development Plan, one major aim of the planning period is to strengthen the international activities of higher education institutions. As part of performance agreements, the Ministry of Education and higher education institutions also agree on the objectives for the institutions' international activities and exchanges. The Ministry of Education grants project funding to support higher education institutions in developing their foreign-language programmes and courses. In addition, supplementary national funding has also been used to support organisation of 'Finnish for Foreigners' and Swedish for Foreigners' courses at higher education institutions.

As from the beginning of August 2005, a two-cycle degree system will be launched in Finnish universities. This will also include an ECTS credit system, which will subsequently be used as the only credit accumulation system in Finnish higher education institutions, including polytechnics.

6.1.3. Increasing teacher mobility

The Development Plan includes aims for international teacher exchanges at higher education institutions and teachers' international capabilities in vocational education and

training. According to the plan, higher education institutions will increase international teacher exchanges and facilitate recruitment of foreign teaching staff. In vocational education and training, teachers' international capabilities, especially language skills, will be improved. National priorities of the mobility projects within the Leonardo da Vinci programme include increasing expert exchanges and in-service training for vocational teachers and trainers.

6.1.4. Promoting mobility in vocational education and training

According to the Development Plan for Education and Research for 2003–2008, the Government aims to improve the prerequisites for the mobility of initial vocational students and qualification-holders. The aim is to increase the number of periods of study and on-the-job learning abroad and enhance procedures for credit transfer. With reciprocal mobility in mind, the supply of foreign-language teaching will be promoted.

Statistics³² compiled by the National Board of Education show that mobility among vocational teachers and students has increased during recent years. At the same time, the number of mobility applications within the Leonardo da Vinci programme has increased, as has the number of applications from vocational institutions to the Comenius programme.

6.1.5. Challenges to mobility

Internationalisation is one of the means whereby the education and training system can meet the challenges resulting from globalisation. So far, internationalisation in education and training has meant arranging exchanges rather than internationalising contents or procedures. In order to shift focus, the Ministry of Education has contemplated preparation of a strategy to promote international mobility. The strategy should cover the whole education and training system. In addition to preparing a strategy, more resources should be directed at promotion of mobility.

6.2. The European dimension of education

The objective of international co-operation in **general education** is both internationalisation of educational contents and procedures and a high level of international mobility. Internationalisation, international education and multiculturalism are included in the National Core Curricula for Basic Education and General Upper Secondary Education. In terms of development of instruction, special attention is paid to language and communication skills, tolerance and knowledge of other cultures and customs. The National Board of Education produces new teaching materials for international education.

Comprehensive schools and upper secondary schools are involved in extensive international co-operation. The Ministry of Education supports schools and other educational institutions in creation of international operating networks, pedagogical

³² See Appendices, Table 13.

development and development of curricula, methods and teaching materials. The Ministry of Education grants schools and other educational institutions about EUR 2 million every year for international activities, in order to increase the number of Finnish educational institutions involved in the Comenius programme, for example.

Within **vocational education and training**, the National Core Curricula and the Requirements of Competence-based Qualifications set the objectives for both vocational competence and other capabilities that are to be developed during education and training. Internationality is considered to be part of vocational learning and citizenship skills. The objective of growth into internationality is for students to manage in a multi-cultural environment and be tolerant and capable in languages, in order to be able to participate in student exchanges and to find placements in the internationalising labour market. Growth into internationality is promoted by means such as periods of study and on-the-job learning and study visits abroad, which are financed by education providers, the National Board of Education and the Leonardo programme, as well as students themselves.

EU education and training programmes and discretionary government transfers allocated to internationality have had a significant impact on development of international co-operation in Finnish initial vocational education and training. In 2004, Leonardo da Vinci programme funds allocated to student exchanges in initial vocational education and training amounted to EUR 780,000. Discretionary government transfers to internationalisation of vocational education and training in 2003 and 2004 totalled EUR 800,000 and EUR 600,000 respectively. Consequently, government transfers were the second largest source of external funding for vocational institutions' international activities in 2004. Government transfers were the most significant funding source for vocational institutions in co-operation with countries outside the European Union and the Nordic countries.

Adult education and training. Participation of Finns in the Grundtvig programme has increased throughout the period of the programme. The aim is to use all of the aid allocated to the programme projects administered at national level for participation of Finns in learning partnership projects and promotion of mobility among adult educators. The aim is to increase Finns' share of approved projects in centralised actions. Finnish adult education institutions are encouraged to organise more European in-service training courses under Grundtvig 3. The Ministry of Education grants adult education institutions a total of about EUR 0.3 million every year for international co-operation, including their co-financing contributions to Grundtvig projects.

Internationalisation of **polytechnics and universities** has been explored in more detail in Chapter 4.1 above.

APPENDICES

TABLE 1 and	Average objectives, indicators and benchmarks of the Education Training 2010 programme in Finland and other EU countries
TABLE 2 Education	Financing of education and research within the Ministry of sector in the Finnish State Budgets between 2001 and 2005
TABLE 3 between 1000 euros	Distribution of funding for education, training and research different Ministries within the 2005 Finnish State Budget,
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TABLE 1

Average objectives, indicators and benchmarks of the Education and Training 2010 programme in Finland and other EU countries

Strategic objective 1: IMPROVING THE QUALITY AND EFFICIENCY

1. Improving the quality of teachers and trainers

Ratio of pupils to teaching staff, primary and secondary education combined:

year	EU25	Finland
2002	in most of the cases less than 15	14.4

2. Developing skills for the knowledge society

Benchmark 3: By 2010, at least 85% of 22-year-olds in the EU should have completed upper-secondary education.

Percentage of population (20-24) having completed at least upper-secondary education:

year	EU25	Finland
2004	76.4%	84.6%

Benchmark 4: By 2010, the percentage of low-achieving 15-year-olds in reading literacy in the EU should have decreased by at least 20% compared to the year 2000.

Percentage of pupils with reading literacy proficiency level 1 or lower in the PISA reading literacy scale:

year	EU25	Finland
2003	19.8%	5.7%

3. Ensuring access to ICT for everyone

Percentage of school computers connected to the Internet:

year	Germany	Norway	Finland
2003	70.7%	81.2%	92.1%

4. Increasing recruitment to scientific and technical studies

Benchmark 2: The total number of graduates in mathematics, science and technology in the EU should increase by at least 15% by 2010 while at the same time the level of gender imbalance should decrease.

Growth of tertiary graduates from mathematics, science and technology fields in %:

year	EU25	Finland
2000-2002	4.6%	7.7%

Students enrolled in mathematics, science and technology as a proportion of all students in tertiary education:

year	EU25	Finland
2002	25.8%	37.2%

Female graduates as a proportion of all MST graduates:

year	EU25	Finland
2001	30.5%	26.8%

5. Making best use of resources

Public expenditure on education as a percentage of GDP:

year	EU25	Finland
2001	5.10%	6.24%
2000-2002	:	6.39%

Expenditure on education institutions from private sources as a percentage of GDP:

year	EU25	Finland
2001	0.6%	0.1%

Enterprise expenditure on continuing vocational training courses as a percentage of total labour costs:

year	EU25	Finland
1999	2.3%	2.4%

Strategic target 2: MAKING EASY ACCESS TO TRAINING

6. Open learning environment

Benchmark 5: The EU average level of participation in lifelong learning should be at least 12.5% of the adult working age population (25-64 age group).

Percentage of population aged 25-64 participating in education and training in four weeks prior to the survey:

year	EU25	Finland
2004	9.4%	24.6%

7. Making learning more attractive

Benchmark 1: By 2010, an EU average rate of no more than 10% early school leavers should be achieved.

Share of the population aged 18-24 with only lower-secondary education and not in education or training:

year	EU25	Finland
2004	15.9%	8.7%

Participation rates in education, students aged 15-24 years:

year	EU25	Finland
2002	58.9%	68.3%

Hours in continuing vocational training courses per 1000 working hours (all enterprises):

year	EU25	Finland
1999	7h	11h

8. Active citizenship, equal opportunities and social inclusion

Strategic objective 3: APPROXIMATION OF EDUCATIONAL SYSTEMS TO THE SURROUNDING WORLD

9. Confirmation of relations to working life, research and society in general

- no indicator

10. Improving entrepreneurship

- no indicator

11. Improving foreign language learning

Average number of foreign languages learned per pupil in general lower/upper-secondary education:

year	EU25	Finland
2002	1.6	2.8

12. Improving mobility and exchange

Foreign tertiary students of all tertiary students enrolled in the country:

year	EU25	Finland
2001/02	5.5%	2.4%

Percentage of tertiary students enrolled outside their country of origin:

year	EU25	Finland
2002	2.7%	3.5%

Erasmus exchange in 2003/2004:

year	EU25	Finland
outgoing	130423	3951
incoming	126879	4709

13. Improving European cooperation

- no indicator

Source: *Progress towards the Lisbon objectives in education and training. 2005 Report. Commission staff working paper. Commission of the European Communities. Brussels, 22.3.2005. SEC(2005) 419.*

TABLE 2

Financing of education and research within the Ministry of Education sector in the Finnish State Budget between 2001 and 2005

Share of Ministry of Education in the state budget 2001-2005	2001	2002	2003	2004	2005	2001-2005 growth%
	milj. €	milj. €	milj. €	milj. €	milj. €	
State budget in total	35 180	35 326	35 722	37 065	37 611	106,9
Ministry of Education	5 079	5 478	5 810	6 054	6 147	121,0
Share of the Ministry %	14,4	15,5	16,3	16,3	16,3	

Education and research in the state budget	2001	2002	2003	2004	2005	2001-2005 growth%
	1 000 €	1 000 €	1 000 €	1 000 €	1 000 €	
Higher education and research	1 122 706	1 188 227	1 244 652	1 298 612	1 322 692	117,8
Polytechnic training	296 597	308 407	330 466	343 451	353 559	119,2
General education	1 591 452	1 607 023	1 782 843	1 842 251	1 900 208	119,4
Vocational education	459 622	490 131	544 542	557 808	573 786	125,3
Continuing vocational education and liberal adult education	297 152	301 125	290 298	305 194	319 523	107,5
Education in total	3 720 377	4 046 249	4 245 559	4 347 316	4 435 975	118,7
Student financial aid	703 885	704 300	717 326	737 968	745 144	105,9
Science	179 754	190 033	206 905	239 554	239 883	133,5
Education study grants and science in total	4 651 168	4 879 246	5 117 032	5 324 838	5 457 005	117,3
Share of the state budget %	13,1	14,0	14,5	14,4	14,4	

Source: *The State Budget 2001 - 2005*

TABLE 3

Distribution of funding for education, training and research between different Ministries within to the 2005 Finnish State Budget (1000 euros)

	State in total 1 000 €	Ministry of Education	Ministry of Labour	Ministry of Social Affairs and Health	Ministry of Trade and Industry	Other Ministries
University education and research		1 322 902				
Polytechnic education		353 559				
General education		1 900 208				
Vocational education		575 786				
Continuing vocational education and liberal adult education		319 523				
Acquisition of vocational labour market training			154 382			
Acquisition of coaching labour market training			46 525			
Education in total	4 672 885	4 471 978	200 907			
Student financial aid		745 144				
Educational benefits of participants in labour market training			132 993			
State subsidy in daily allowance for training				11 000		
State subsidy in adult education grants				18 000		
Student financial aid and educational benefits in total	907 137	745 144	132 993	29 000		
Finance on research and development³³	1594 000	671 600	14 000	116 100	546 100	246 200

Source: The State Budget 2001-2005

³³ Figures on R&D finance from Statistics Finland.

TABLE 4

Labour market training figures

	2001	2002	2003	2 004
Appropriations used on labour market training (euros)				
-Total	261 726 000	300 960 000	361 660 000	390 914 000
Those who started training (ESF training not included)	58 480	64 427	64 066	69 801
- vocational training	52 %	59 %	58 %	57 %
- preparatory training	48 %	41 %	42 %	43 %
Student working days				
-total	5 338 666	6 304 242	6 296 266	7 005 992
-vocational training	3 982 442	4 772 821	4 497 172	5 074 131
-preparatory training	1 356 224	1 531 421	1 799 094	1 931 861

TABLE 5A

The proportion of funding for commercial services in the total costs of different forms of education and training in 2003³⁴

Total costs of 2003 and finance (1000 euros)				
Form of education	Finance in total euros	where state subsidy 2 euros	where chargeable service activity	
			euros	%
General education ³⁵	2 957 368	2 919 030	38 338	0,0
Upper secondary school	446 304	440 222	6 082	0,0
Vocational education ³⁶	1 489 244	1 072 185	387 308	26,0
Polytechnics	792 023	616 423	92 239	11,6
Liberal adult education				
- Folk high schools	89 493	41 514	14 446	16,1
- sport education centers	43 118	18 462	10 261	23,8
- Adult education centers	117 644	71 175	1 042	0,9
- Summer universities	14 512	3 660	1 169	8,1
Arts basic education (hourly)	91 475	48 094	2 702	3,0

Source: Finnish National Board of Education

³⁴ Chargeable service activities in universities and other finance external to the budget presented in table 5B.

³⁵ Only the basic and upper secondary education by municipalities. Chargeable service activity includes other expenditure than that belonging to the state subsidy (not separately inquired the incomes and outcomes of chargeable service activity). Incomes in this sector are sales proceeds.

³⁶ Not including the share of state owned educational institutions, which are financed by the state budget. Government subsidy on liberal adult education and arts basic education is 57%, for other forms of education presented in table 100%. Municipalities participate the finance according to the number of their population, regardless of education it provides.

TABLE 5B

Non-budgetary funding for universities by field and source in 2004 (1000€)

	Total	Academy of Finland	National Technolog y Agency	Domestic enterpris e	Other domestic	EU	Foreign enterpris e	Other foreign
Total	690 011	144 482	91 339	100 196	258 332	73689	10 095	11 878
Theology	2 378	1686		1	574	56		61
Humanities	20088	10613	636	191	7216	687	19	726
Art and Design	8211	964	1276	1363	2660	1488	288	172
Music	2138	101			1750	287		
Theatre and Dance	837	82		159	583			13
Education	13422	2847	323	270	7205	2536		241
Psysical Education	1799		65		867	867		
Social science	29206	10102	1278	913	13106	3271	43	493
Psychology	6253	3808	38	303	1846	162	8	88
Health Sciences	5881	1246	589	1022	2100	789	124	11
Law	3550	1446		29	1867	78		130
Business	34125	3875	3440	5164	15048	5315	196	1087
Natural Science	96318	42214	13339	6691	20632	11143	937	1362
Agriculture and Forestry	17325	5907	2009	719	7548	952	38	152
Technology	176400	25994	53032	46414	34966	13509	734	1751
Medicin	64258	18358	5607	4346	20506	5462	6867	3112
Dentistry	2773	411	888	73	1286	32	75	8
Veterinary Medicine	5289	482	288	125	4290	27		77
Pharmacy	7718	788	3108	525	2104	1128	28	37
Fine arts	133			7	48	6		72
Other	191909	13558	5423	31881	112130	25894	738	2285

Source: KOTA database

TABLE 6

Target numbers for entrants in 2008³⁷

<i>Education</i>	<i>Education the youth age groups</i>	<i>Education for adults</i>	<i>Total</i>	<i>Entrants 2002 total</i>
Upper secondary school				
The whole curriculum	36 000	5 000	41 000	41 000
Subject syllabi ³⁸		15 000	15 000	13 000
Initial vocational training				
Vocational qualifications ³⁹	45 700	13 500	59 200	60 700
Further and specialist vocational qualifications ⁴⁰		49 000	49 000	38 000
Other further training ⁴¹		5 000	5 000	5 900
Polytechnic				
Basic (BA) degrees	25 900	6 000	31 900	31 400
Master's degrees		2 000	2 000	200
Specialisation		5 000	5 000	6 000
Open polytechnic ⁴²		20 000	20 000	7 600
University				
Basic (MA) degrees ⁴³	18 900	5 000	23 900	24 600
Postgraduate education ⁴⁴		2 000	2 000	
Postgraduate specialist degrees ⁴⁵		6 000	6 000	
Open university ⁴⁶		90 000	90 000	85 000
Liberal adult education⁴⁷		24 000	24 000	20 500
Vocationally/professionally differentiated education and training	90 500	24 500	115 100	117 000

³⁷ In the Ministry of Education sector

³⁸ Number of participants

³⁹ Including apprenticeship training; the 2008 target does not include 20-credit home economics courses, preparatory and rehabilitative training for the disabled, or preparatory training for immigrants

⁴⁰ Including apprenticeship training

⁴¹ Number of annual students

⁴² Number of participants

⁴³ In 2002 first-time enrollers, including 5,080 admissions in special quotas

⁴⁴ Full-time research training

⁴⁵ The average target set by universities for continuing professional education in the performance agreement period 2004-2006 is 100,000 students annually including 6,000 students in professional specialisation

⁴⁶ Number of participants

⁴⁷ Number of annual students

TABLE 7

Drop-out from qualification-oriented education in different forms of education between 2001 and 2004*)

	2001	2002	2003	2004 (estimate)
Upper-secondary school	2,4%	2,2%	2,0%	2,0%
Vocational basic education ^{**)}	11,7%	10,8%	10,2%	10,0%
Polytechnics	7,2%	6,0%	6,2%	6,2%
Universities ^{***)}	3,8%	4,8%	4,5%	4,5%

*) Concerns those who drop out completely and who do not replace elsewhere in the education system.

***) Not including training preparing for vocational competence-based qualifications , apprenticeship training or training in specialised institutions.

***) Includes both lower and higher education degrees. Not including University of Art and Design due to insufficient student numbers.

Source: Ministry of Education 2005.

TABLE 8

International student mobility in universities by field and source 2004

Exchanges over 3 months, lower and higher degree students

	Persons abroad	Duration of visits months	Foreigns visitors kpl	Duration of visits months
Total	4 279	5,9	4 341	6,1
Theology	33	6,1	15	6,7
Humanistics	986	6,0	551	6,5
Arts and Design	65	5,5	134	5,5
Music	66	7,6	42	7,3
Theatre	12	4,0	3	4,0
Education	184	4,8	229	4,4
Physical Education	23	4,9	47	5,7
Social Sciences	518	5,9	544	6,3
Psychology	46	5,8	26	6,7
Health Sciences	21	5,4	8	8,1
Law	201	6,0	185	6,8
Business	863	5,3	923	5,4
Natural Science	311	6,2	291	6,7
Agriculture Forestry	84	5,7	115	6,1
Technology	740	6,7	982	6,5
Medicin	54	5,5	141	6,4
Dentistry	11	4,3	26	4,1
Veterinary	6	5,5	15	4,1
Pharmacy	23	5,1	36	5,5
Fine Arts	32	4,8	27	5,1
Other			1	5,0

Source: KOTA database

TABLE 9

Visits by foreign teachers and researchers to universities by field in 2004, >1 month

	Persons abroad	Duration of stay months	Foreign visitors	Duration of stay months
Total	635	4,0	1060	5,2
Theology	14	4,0		
Humanistics	74	3,2	43	3,3
Arts and Design	6	1,8	7	2,4
Music				
Theatre	4	1,0	3	1,7
Education	17	4,1	7	5,4
Physical Education	1	12,0	4	3,5
Social Sciences	67	3,7	41	3,7
Psychology	13	4,2	15	5,1
Health Sciences	4	6,3	6	6,2
Law	8	3,6	2	5,0
Business	41	4,7	27	3,0
Natural Science	129	3,0	263	4,1
Agriculture Forestry	17	3,2	16	3,9
Technology	154	4,7	469	6,7
Medicine	50	5,8	79	4,9
Dentistry	4	4,3	10	3,2
Veterinary			5	2,8
Pharmacy	4	4,0	14	4,0
Fine Arts				
Other	28	4,5	49	3,4

Source: KOTA database

TABLE 10

**International polytechnic placements and exchange by institution in 2003
> 3 months**

Polytechnic institution	Number	Average duration in months	Number	Average duration in months
	Finns abroad		Foreigners in Finland	
Polytechnics total	in 3 691	4,8	2 635	4,5

Source: AMKOTA database

TABLE 11

International polytechnic teacher and expert exchange by institutions in 2003

	> 1month				< 1 month			
	Finns abroad		Foreigners in Finland		Finns abroad		Foreigners in Finland	
Polytechnics	Number	Avarage duration in months	Number	Avarage duration in months	Number	Months in total	Number	Months in total
Total	72	1,7	73	2,6	2 564	906	1 462	586

Source: AMKOTA database

TABLE 12

Participants in Socrates and Leonardo da Vinci programmes in Finland in 2003 and 2004

Socrates	2003	2004
<i>Outgoing</i>	4561	5255
<i>Incoming</i>	5490	6142
Comenius		
<i>School projects</i>	268	263
<i>Language projects</i>	40	27
<i>Development projects</i>	52	54
<i>Preparatory visits</i>	65	87
<i>Further education for teachers</i>	119	99
<i>Language assistants (outgoing)</i>	24	21
<i>Language assistants (incoming)</i>	31	31
Erasmus		
<i>Student exchange (outgoing)</i>	3402	3951
<i>Student exchange (incoming)</i>	4577	5166
<i>Teacher exchange (outgoing)</i>	882	995
<i>Language cources (participants)</i>	172	191
<i>Projects (Coordinator)</i>	24	19
<i>Projects (Partner)</i>	124	102
<i>Mundus MA-programme (coordinator)</i>		1
<i>Mundus MA-programme (partner)</i>		3
Grundtvig		
<i>Projects (Coordinator)</i>	1	3
<i>Projects (Partner)</i>	9	10
<i>Learning partnership (Coordinator)</i>	7	8

<i>Learning partnership (Partner)</i>	31	42
<i>Mobility</i>	29	63
Leonardo da Vinci programme		
<i>Outgoing Finland</i>	937	997

Source: International Center for Mobility (CIMO)

TABLE 13

Mobility in vocational education and training in Finland 2001-2003

Outgoing from Finland

Outgoing	2001	2002	2003
Students	3270	3600	4465
Professionals and teachers	1050	1500	1870
Total	4320	5100	6335

Incoming to Finland

Incoming	2001	2002	2003
Students	1800	1500	2200
Professionals and teachers	630	1050	850
Total	2430	2550	3050