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Higher education institutions 2009

 universities and polytechnics as implementers of higher education policy

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Foreword

The year 2009 was marked by significant changes in higher education and science policy. The act implementing the new Universities Act entered into force in August, enabling the reorganisation of the universities. From the beginning of 2010, universities will acquire the status of independent legal persons and will be separated from the State. However, the State will continue to be the primary financier of the universities; universities are after all the foundation of the Finnish innovation system and the most central institution in terms of innovating education and culture.

The Polytechnics Act and laws governing the Academy of Finland were also amended to correspond to the forms of activities and modern administrative models stipulated under the new Universities Act. To advance the restructuring of sector research, a cross-administrative Sector Research Advisory Board was reappointed under the auspices of the Ministry of Education.

Higher education institutions are currently revising their overall strategies. Based on this strategy work and the guidelines issued by the Ministry of Education, a structural development programme will be devised and it will be included in the policy report to be published in autumn 2010 by the Research and Innovation Council chaired by the Prime Minister. The report will also include the policies on developing sector research structures. The aforementioned reforms will support the competitiveness of Finnish higher education and research, as well as promote their internationalisation, quality and the efficient use of resources.

The international evaluation of the Finnish innovation system, completed in autumn 2009, states that the reforms carried out so far have been correct but they do not go far enough. A similar view was expressed in the Academy of Finland's evaluation entitled *The state and quality of scientific research in Finland*.

Long-term investments in higher education and research and development activities have led to an improvement in the quality of higher education institutions and scientific research in Finland and to an increase in international co-operation. The international evaluation of the Finnish innovation system also stated, however, that regardless of its achievements, a central weakness of Finland's system of higher education and research compared with its competitors is the lack of internationalisation.

Finland's performance in international comparisons assessing competitiveness and information society development has shown a downward trend, while reports describing the state of scientific research in Finland have indicated that the top international research institutes are increasing their lead over Finnish researchers. There is a danger that Finnish higher education institutions and, more generally, Finland as a model country in terms of innovation policy will lose their position as internationally attractive co-operation partners.

In spring 2009, the Ministry of Education published a Strategy for the Internationalisation of Higher Education Institutions in Finland 2009–2015, which was prepared by an extensive body of stakeholders. The internationalisation strategy is linked to the Government's extensive development programme for the higher education system and the public research and innovation system, which started its work in spring 2007. The programme's key projects include the reform of the university system, review of the Polytechnics Act, the structural development of higher education institutions, the national innovation policy report, national research infrastructure policy and the four-tier researcher career system.

The aim of the higher education internationalisation strategy is to ensure Finland has a strong international and attractive higher education and research community, which promotes society's ability to function in an open international environment, supports the balanced development of a multicultural society and shoulders the responsibility for solving global problems. The internationalisation of Finnish higher education institutions will promote the quality of higher education and research.

In addition to challenges related to internationalisation, higher education institutions must be able to respond to national challenges, such as the rapid aging of the population. Extending careers has been raised as one of the ways of stabilising the Finnish national economy in the coming years. Ensuring that young people start their studies earlier and decreasing the number of drop-outs are among the measures that higher education institutions can adopt to promote the aim of extending careers. The evaluation of degree reforms related to the Bologna Process will be launched in 2010.

In the economic recession of the 1990s, Finland invested heavily in competence development. This meant investments in universities' basic resources, research activities and the building of the polytechnic network. The results were commendable – the Finnish national economy grew, and through its concerted efforts the innovation system developed into an international benchmark. In the current economic recession, we must again put our faith in competence development. However, besides strengthening the basic conditions for research and education, additional focus must now be placed on transferring competence and the comprehensive exploitation of competence as well as disconnecting resources from structures, and to some extent from volumes, in order to enhance the quality and impact.

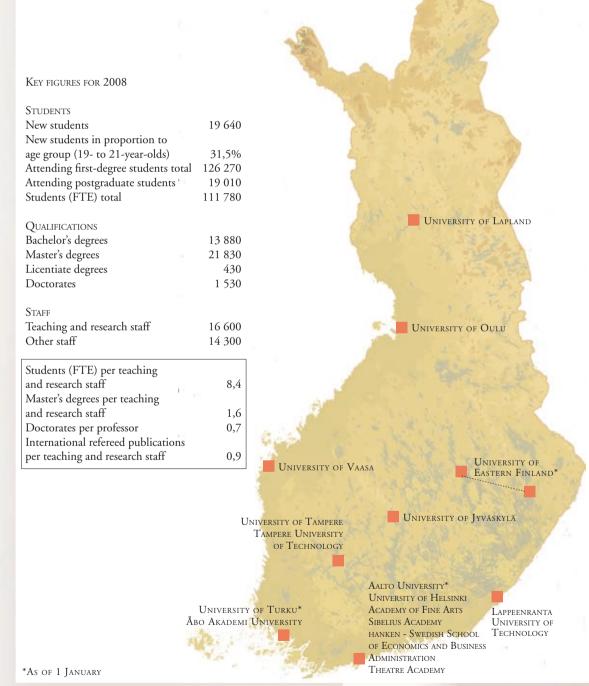
The measures for meeting future competence challenges include degree structures and content reform, the general reform of adult education alongside many other measures that the Ministry of Education has been preparing in collaboration with key stakeholders. Foresight activities regarding workforce, education and competence needs have clearly become more demanding following the rapid changes society has undergone recently. It is also important to bear in mind that the growth of the Finnish education system will reach a turning point once the intake year groups begin to get smaller after 2012. Finland's education system must generate flexible ways for the employed adult population to update and renew its competencies.

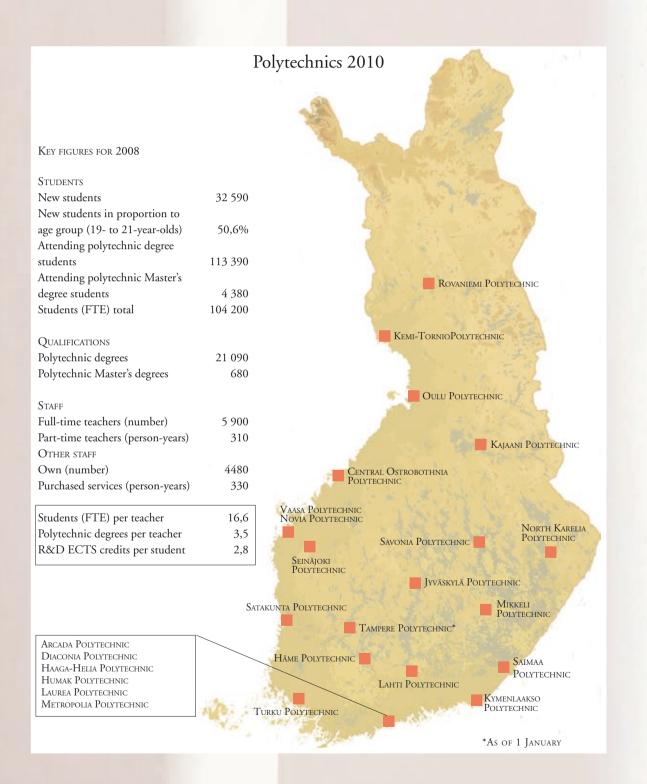
The aim is to maintain university funding during the transition period following the new Universities Act at the same level as in previous years. The Ministry of Education has started the preparation work for drawing up a university funding model for the period 2013–2016, the objective being a model which will create incentives for strengthening the quality and effectiveness as well as the international dimension of higher education. The aim is that the impacts and profile of the strategy implementation currently underway will be more strongly reflected in the activities and funding base of the universities during the funding period 2013–2016.

The steering of universities and polytechnics has been harmonised and taken in a more strategic direction. Owing to the university reform and the new steering model for higher education institutions, this publication has also been developed to meet the needs of the changing steering activities. This publication will introduce the steering principles for higher education institutions for the agreement period 2010–2012. The objectives and indicators described in this publication are included in the agreements with the universities and polytechnics, and their attainment will be monitored on the basis of written reports provided every year by the higher education institutions. In future, this publication will provide an overview at the annual level of the state of the higher education system in relation to the set verbal objectives and target indicators.

Anita Lehikoinen Director

Universities 2010





2 Topical events in higher education policy

The ongoing general reform of higher education affects both universities and polytechnics. The higher education reform comprises reform of the Universities Act and concurrent reform of the Polytechnics Act and of the legislation pertaining to the Academy of Finland. To coincide with the reforms, structural development of higher education, strategy work in universities and polytechnics, promotion of internationalisation and reform of the university funding model are in progress. Preconditions for research are promoted not only by the development of higher education institutions but also by the creation of a national research infrastructure policy, development of structures for sectoral research and implementation of a national innovation strategy and the policies presented in the Government report on innovation policy.

In February 2009, the Government policy work group decided on the measures to be taken to prepare for the coming recession and, also, to strengthen the preconditions for long-term economic growth. Competence and a nationwide strong competence infrastructure, in which universities and polytechnics play a crucial role, were recognised as key growth factors. The ongoing reform of higher education excellently supports responding to these challenges identified by the policy work group.

2.1 Steering of higher education institutions to be streamlined

Steering of universities and polytechnics will be reformed and harmonised beginning in 2010. The steering of universities will be streamlined to emphasise the key goal of the autonomy of the higher education institutions being reformed and the university reform – the strengthening of the financial and administrative autonomy of the universities. Simultaneously, the reform provides universities with the flexibility to organise their operations and operational prerequisites corresponding to those available to the leading international higher education institutions.

For the first time, degree requirements will be set for polytechnics instead of agreeing on study places. The strategy work by the higher education institutions will gain significant weight in the steering of both higher education sectors. The key reform for polytechnics is that the regulation of study places for young people and adults will be abondened. This provides polytechnics with more flexible opportunities to organise their operations.

Agreement and agreement negotiations to be more strategic

During the 2010–2012 agreement period, particular focus areas of higher education development measures will be internationalisation and reducing study times. Moreover, with regard to universities, special attention will be paid to the fostering of the researcher career.

The content of the agreement between the Ministry of Education and the universities will be amended to make it more strategic, simplified and limited to only the most central indicators. The agreements set the common goals for higher education, the task, profile and focus areas of each higher education institution and discipline-specific degree targets and other quantitative goals, important development measures of the higher education institution and the principles of funding allocated by the State. From now on, the annual agreement negotiations between the Ministry of Education and the higher education institutions will be held every four years. The negotiations will agree upon how national higher education objectives will be implemented by each higher education institution. During the 2010–2012 agreement period, the common goals of universities and polytechnics will be based on the Government Programme, the education and research development plan for 2007–2012, the guidelines for the structural development of higher education institutions for 2008–2011, the Ministry of Education action and economic plan for 2010–2013, the higher education internationalisation strategy, the general reform of adult education and the policy guidelines of the Research and Innovation Council and the Advisory Board for Sectoral Research.

In the 2008 negotiations with the universities and polytechnics, it was agreed that the higher education institutions would reform their strategies so that they can be utilised in the 2010 negotiations. Strategy work requires cooperation between higher education institutions and interaction with other actors in the region and with the innovation system. The aim is that the profiles of the higher education institutions will form a nationwide whole covering the educational and research needs of society. The profile of each higher education institution can give different weight to research and development, youth degree education, adult education and lifelong learning, artistic activities and innovation and regional activities.

The task, profile and focus areas of each higher education institution will be decided on based on strategy work done in the higher education institutions. The key development measures for each higher education institution recognised in the agreement support the strategy or structural development of that particular institution.

In the 2010–2012 agreement period, higher education institution-specific goals are agreed upon as a threeyear average objective for higher education degrees by field of study. In universities, educational field-specific targets will be set for Master's and doctoral degrees, in polytechnics for polytechnic degrees. Degree targets are set before the actual negotiations, and quantitative objectives will not discussed further in the negotiations. Objectives for Bachelor's degrees in the universities and polytechnic Master's degrees, teacher training studies and student mobility in the polytechnics will be decided at the level of the higher education institution.

From the beginning of 2010, the allocation principles of polytechnics will be changed so that the regulation of study places for youth education and of the annual number of students in adult education is abolished, and replaced by educational field-specific degree targets.

In addition to quantitative degree targets, the agreement sets higher education institution-specific quantitative goals and new agreement indicators demonstrating the State of the higher education institutions. The point of departure for the indicator targets is the balanced development of higher education and consolidation of the quality and effectiveness of the higher education institutions. Agreement indicators are discussed in more detail in Chapter 3.

The agreements will be prepared through the KOTA database, which will also be extensively utilised while the Ministry of Education monitors the development of the higher education institutions and attainment of agreed objectives.

Written feedback as steering method

From now on, the Ministry of Education will also steer universities and polytechnics through written feedback. During the agreement period, the higher education institutions will be given written feedback on the operations during the previous year. This feedback will be sent to the higher education institutions in those years when there are no agreement negotiations. In the year with negotiations, feedback will be given during the negotiations.

The Ministry of Education will utilise the feedback procedure to steer and monitor the attainment of higher education policy objectives during the agreement period. Moreover, the feedback may be used to provide more detail on the goals set for the higher education institutions than is possible in the agreement text or to highlight topical development themes. During the 2010–2012 agreement period, the Ministry of Education will give its first written feedback to the higher education institutions on the activities of 2010 in 2011.

2.2. Reform of the Universities Act

The aim of the university reform is to create the same operational preconditions for the universities as those already in place in the best international universities. This can be achieved by giving the universities the economic and administrative prerequisites to strengthen the quality and effectiveness of research and teaching as well as their international cooperation.

On 16 June 2009, the Parliament ratified the new Universities Act. The Act bestows economic and administrative autonomy on the universities but the universities' main tasks, research and teaching and societal interaction, will remain the same. The State will ensure the core funding of the universities, which will remain at the current level and be bound to an index.

Provisions will be laid down in the new Universities Act on the university administration, financing and the steering of the operations as well as matters pertaining to university research and teaching, students and staff. The economic and administrative autonomy of the universities will be strengthened as they are given the status of independent legal person.

From the beginning of 2010, the universities will become independent institutions under public law. The operations of the Helsinki University of Technology, the Helsinki School of Economics, and the University of Art and Design Helsinki will be merged into the new Aalto University, whose operations will be organised pursuant to the Foundations Act. In addition, the Tampere University of Technology will operate from the beginning of 2010 as a foundation-based university pursuant to the new Universities Act. Other universities will become universities under public law and at the same time the number of universities will decrease from 18 to 16. The reformed university institution is discussed in more detail in Section 2.3.

Research and teaching will remain the main tasks of universities

The reform will improve the operational preconditions of Finnish universities and strengthen the quality and effectiveness of teaching and research. The universities will also have better opportunities than hitherto to succeed internationally.

The freedom of research, arts and teaching will be ensured. The universities will also in the future continue with their public duty and provisions on their duties, educational responsibilities and rights to confer degrees are are laid down in the Universities Act and decrees. The Ministry of Education steering ensures that the national objectives of higher education and science policies can be attained and the allocation of degree targets ensures that the availability of a labour force with higher education qualifications corresponds to the needs of the world of work.

The mission of the universities is to promote free research and scientific and artistic education to provide higher education based on research. In carrying out their mission, the universities shall promote lifelong learning, interact with the surrounding society and promote the societal effectiveness of research outputs and artistic activities. The primary task of the universities is to engage in scientific research, and this also serves as the basis for their educational activities.

The new administrative model of universities emphasises their autonomy

The administration and management of the universities will be reformed and strengthened so that the universities can respond to the challenges and opportunities introduced by their new economic situation better and more independently than hitherto. The status of the Rector and the academic decision making of the universities will be further strengthened. The new, stronger, economic and administrative autonomy opens up new possibilities for the university operations but also challenges them by presenting them with new kinds of responsibilities. For example, financial administration and management require a new, more entrepreneurship-type competence, when the responsibility for ensuring solvency and liquidity are transferred to the reformed universities.

The societal relationships of the universities are, for their part, promoted by the fact that, under public law, at least 40% of the members of the new university Board of Directors must come from outside the university. The university electoral college will choose the Board members. If it so wishes, the college can also choose a majority of outsiders for the Board. The Chair and Vice-Chair of the Board must be chosen from outside the university community.

The Board of a foundation-based university has seven members, three of whom are individuals nominated by the founders of the foundation. There must be at least twice as many candidates nominated by the foundation founders as there are available posts. The Board is appointed by the common multi-member body after consulting the foundation founders. A Board consisting entirely of outsiders can also be elected for foundationbased universities. The Chair and Vice-Chair must be outsiders.

The status of the university staff is secured

The employment relationships of the staff in all universities will change from that of a public-service relationship to a contractual employment relationship regulated by general work legislation. From now on, the employer will be the university instead of the State. Transferring the human resources management to the discretion of the universities also supports their competitiveness. A flexible human resources and salary policy enables, for example, the recruitment of international top experts to the university.

The status of the current staff of the universities will be secured during the transition. During the transition to the reformed universities, the employees in the employment of the universities who were born before 1980 will stay in the State pension system for as long as they are in an employment relationship with the university. Other staff and individuals recruited subsequently will be transferred to the private pension system.

The status of students remains unaltered

The university reform does not alter the status of students within the university. Student unions are associations under public law as enacted in the Universities Act. All the students admitted to programmes leading to a lower or higher university degree will continue to be members of the unions.

Student selection will remain the responsibility of the universities. A national joint application system will also be implemented in the universities. With the introduction of the joint application system, the so-called 'rule of one study place' will be clarified. A student has the right to accept only one study place leading to a higher education degree from education beginning during the same academic term from a university or polytechnic belonging to the national joint application system.

Education leading to a higher education degree will remain free of charge. In addition, a pilot project will be launched, where universities and higher education institutions can apply for permission for individual foreign-language Master's degree programmes to collect a fee from students coming from outside the EU/EEA. The pilot project includes a scholarship system organised by the universities. The results of the term fee pilot project will be evaluated in 2012.

The State will remain the primary financier of universities

The State will continue to guarantee sufficient core funding to all universities, the development of which will be connected with the increase in cost level. The law reform will expand the universities' opportunities to diversify their funding basis. For its part, the consolidation of quality and effectiveness improves the universities' prerequisites for attaining internationally competed funding. University funding is discussed in more detail in Chapter 4.

In addition to core funding, the universities will continue to receive State funding from public-competed funding (e.g. Academy of Finland and Tekes - the Finnish Funding Agency for Technology and Innovation). Moreover, the universities can use capital acquired through possible business activities, donations and capital income for funding their activities.

The State as capital provider for universities

The State capitalises universities in order to ensure the necessary liquidity, solvency and creditworthiness since the State will no longer continue as the guarantor of solvency. Capitalisation of universities is done with direct money transfers, movable assets owned by the State but possessed by the universities, and real property. In addition to the State, other bodies may use, for example, donations to capitalise the reformed universities.

The State-owned university real estate administered by Senate Properties will be hived off into three realestate corporations so that the real estate used by the University of Helsinki will be hived off into one corporation, the real estate used by the Helsinki University of Technology, the Helsinki School of Economics and the University of Art and Design Helsinki (comprising the new Aalto University) into another corporation and the real estate of the rest of the Finnish universities into a third. The shares of these real-estate corporations will be distributed so that the reformed universities will receive two-thirds of the shares in the corporation and onethird will remain with the State.

The act bringing into force the new Universities Act entered into force on 1 August 2009 after which the reformed universities organise themselves as independent legal persons pursuant to the new Universities Act. The reformed universities will commence their operations on 1 January 2010. The Government has with its decisions ensured that the economic conditions of the universities are stable when they launch their operations.

Extensive reform also affects other legislation

The effectiveness and the extent of the university reform is demonstrated by the fact that the Polytechnics Act and legislation pertaining to the Academy of Finland are also being reformed to correspond to the operational models of the reformed universities. In addition to these, the university reform has repercussions for 27 other acts and decrees.

The key amendment to the Polytechnics Act is that the polytechnic Master's degree is positioned as a firstcycle tertiary education degree. The law reform harmonised, for example, provisions pertaining to the setting of degree requirements, quality assurance and free education to correspond to the provisions in the Universities Act and enabled the organisation of the preparatory training of immigrants for polytechnic studies.

A provision corresponding to the Universities Act was added to the Polytechnics Act, on the basis of which the higher education institutions can collect fees in individual programmes from students coming from outside the EU/EEA. Consequently, the term fee pilot applies in addition to the universities' foreign-language Master's degree programmes to Polytechnic Master's degree programmes, which will be recognised in the degree programme decision by the Ministry of Education. The higher education institutions shall develop a scholarship system for their fee-based programmes to support the studies of talented non-Finnish students as well as those with limited means in Finland.

One of the aims of the university reform is the reform of the sectoral research structures. The Sector Research Advisory Board will be reappointed in autumn 2009 and its tasks will include the preparation of the structural development programme of sectoral research.

2.3 Structural development of higher education institutions continues

Universities and polytechnics are currently reforming their strategies so that they can be utilised in the negotiations to be held in 2010. An action programme on the structural development of higher education institutions will be drawn up on the basis of the higher education institutions' strategies, that will be included in the Prime Minister-led Research and Innovation Policy Council 2020 policy report.

The structural development of higher education institutions is linked with the general reform of the public research system and the modernisation of European higher education.

Structural development of higher education institutions aims at reallocating resources from structures to improve the quality of teaching and research and to boost international competitiveness by means of, for example, aggregating activities to larger entities. A regionally comprehensive higher education network will be secured. Higher education activities will be increasingly concentrated in common campuses, where various actors in the innovation system can meet in creative and innovative surroundings.

Structural development of higher education institutions seeks to contribute to greater effectiveness, highquality core processes – teaching and research – and more distinct profile building of higher education institutions, collaboration between them and their ever-stronger internationalisation. Instead of permanent institutional structures, the effectiveness of higher education institutions emphasises operational models pertaining to transfer of competence and flexible educational arrangements, such as adult education and R&D&I (Research & Development & Innovation) activities serving regional special needs. Infrastructure cooperation is desirable in the cooperation between universities and polytechnics. The degree profiles should be retained in education but educational cooperation is to be desired.

The university foundation of the Aalto University, comprising the Helsinki University of Technology, the Helsinki School of Economics and the University of Art and Design Helsinki, was founded in summer 2008 and the new university will launch its operations in full scale at the beginning of 2010. The Tampere University of Technology will begin its operations as a foundation-based university on 1 January 2010.

The remaining 16 universities will organise themselves as universities under public law. The University of Eastern Finland, comprising the universities of Joensuu and Kuopio, and the new University of Turku formed through the merger of the University of Turku and the Turku School of Economics will launch their operations on 1 January 2010.

In the polytechnic sector, the merger between the Tampere Polytechnic and PIRAMK Polytechnic will take place in March 2010. Other promising partnership structures closer than project-based cooperation are being prepared around Finland. For example, the Eastern Finnish North Karelia Polytechnic and Savonia Polytechnic were engaged in agreement negotiations in spring 2009.

The most advanced cooperation project is the Lapland higher education group. It is a cooperation structure joining together the universities and polytechnics in the area, in which the University of Lapland, Rovaniemi Polytechnic and the Kemi-Tornio Polytechnic have agreed upon the distribution of work and share a common strategic vision.

3 Common objectives of higher education institutions

Common objectives of higher education

With their activities, the universities and polytechnics will promote public well-being and education as well as sustainable economic, cultural, ecological and social development. The activities are of high quality, effective, ethical and support the development of a multicultural society.

The universities and polytechnics are the foundation of the innovation system. The higher education institutions take an active role in society. Enterprises, work communities and authorities are interested in taking part in the development of the higher education institutions and in utilising their competence.

The higher education institutions will develop their activities as international and attractive learning and research communities. The higher education institutions will profile themselves internationally in their expert areas and will shoulder their responsibility in solving global problems.

The higher educations will organise their activities cost-effectively, profitably and efficiently. In their operations, the higher education institutions aim at relevant cooperation and division of duties. Structural development will be continued with the aim of creating a more closely knit higher education network, and strong, attractive and, with regard to their research and development activities, individually profiled higher education units.

The universities will consolidate the preconditions of high-quality research, artistic activities and equal researcher career opportunities as well as their position in the international field of research. In accordance with their profile, the universities will ensure the availability of a workforce and researcher corps.

The polytechnics will consolidate teaching and entrepreneurship linked with the world of work, artistic activities and regional needs and, in particular, research and development linked with the development of enterprises, work communities and the third sector. In accordance with their profile, the polytechnics will ensure the availability of a workforce.

The higher education institutions will consolidate the preconditions for lifelong learning by making educational arrangements more flexible, developing the validation of prior competence and by diversifying the offerings of open higher education. The universities and polytechnics will reform their student selection processes to expedite the transition from upper secondary education to higher education. The development of study processes reduces drop out and expedites the completion of degrees and the consequent transition to the world of work. The universities will adopt a national student feedback system. The polytechnics will continue to develop the contents of their student feedback system.

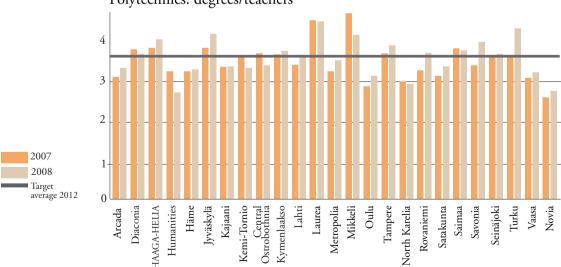
The universities and polytechnics will increase their cooperation with other actors in the world of work and the innovation system. The needs of regions and the world of work are met primarily by developing adult education. The higher education institutions take an active role in the preparation of regional strategies and regional development. The higher education institutions will promote the commercial and social utilisation of their research outputs and competence as well as their innovation services.

The higher education institutions will develop their operations so that they will be competitive, equal and interesting work and study places. The higher education institutions will utilise the results of evaluations and quality assurance system audits in developing their operations. The national policy objectives of higher education and science have been included in the common objectives of higher education institutions, which will be recognised in the agreements between higher education institutions and the Ministry of Education in the 2010–2012 agreement period. Comprehensive monitoring of indicators surveying the higher education institutions as a whole will be developed for monitoring the attainment of policy goals.

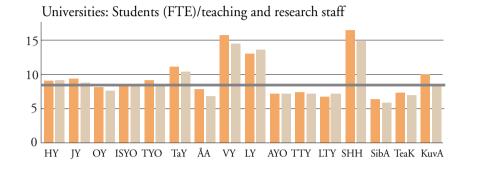
The national point of departure for the indicator targets is the balanced development of higher education and consolidation of the quality and effectiveness of the higher education institutions. The indicators recognised in the agreement will be used to survey the key themes of higher education policy: smooth progression and quality of study processes, scientific postgraduate education and research activities, internationalisation and social impact of higher education institutions.

3.1 Basic studies and study processes

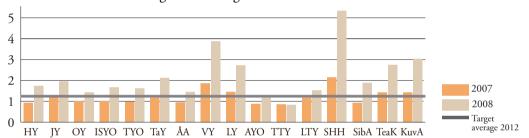
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Polytechnics: degrees/teachers



Universities: Master's degrees/teaching and research staff



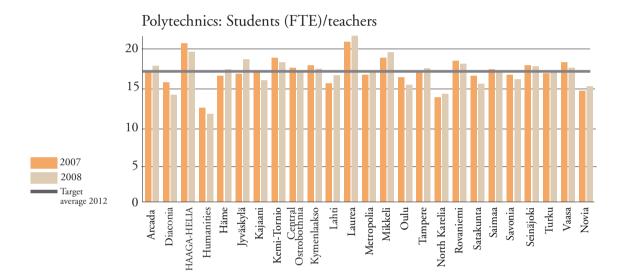
The aim of the development of higher education and study processes is to expedite the transition from upper secondary education to higher education, shorten study times and lengthen the work careers of young people. The Ministry of Education has appointed a committee to study the transition to higher education and completion of the degree as well as a broad-based steering committee to survey the current situation of progress from upper secondary education to higher education, identify difficulties in it and to propose how this transition could be expedited. With regard to student selection, the work of the committee will be completed by the end of 2009, in other respects by the end of March 2010.

Another key issue, is the relevant use of study places and that there are effective study opportunities available in adult education for updating and renewing competence. One of the aims of the general reform of adult education is to produce flexible education structures with which to meet the needs of the world of work by developing the competence of individuals. At the same time, study places are freed for young people in degree education. The development of competence is also the perspective adopted in the national qualifications framework. Allied with this, pilot projects have been launched in 2009 to introduce apprenticeship-type extension education in the sphere of higher education.

Quality and reduction of degree completion times are at the heart of the development higher education basic studies and study processes. Indicators pertaining to quality of education in the 2010–2012 agreement period include the student-teacher ratio, the number of degrees in proportion to the number of teachers and the share of students who have completed at least 45 ECTS credits of those in degree education. The smooth progression of study processes and relevance of study counselling are assessed by studying the share of students

who have completed their degree of the total number of students who have commenced their degree studies 5 and 7 years after commencement of studies (%) and by surveying study completion rate.

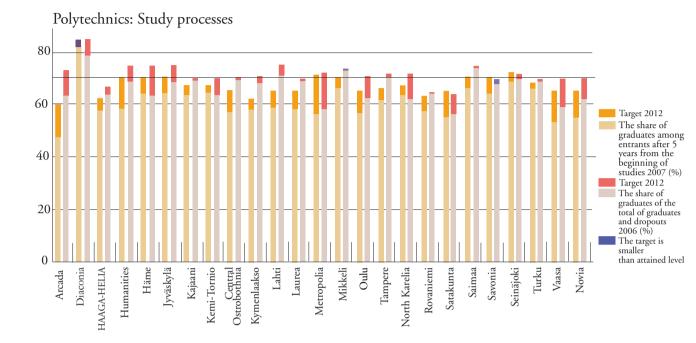
The effectiveness of the higher education institutions' core processes, teaching and research are also studied with average attainment figures of degree targets set for the agreement period. Field-specific degree targets with regard to Master's and doctoral degrees and university-specific target for Bachelor's degrees have been set for the universities. With regard to polytechnics, field-specific degree targets have been set for polytechnic degrees. The target for polytechnic Master's degrees is at the level of the higher education institution.



3.2 Scientific postgraduate education in universities

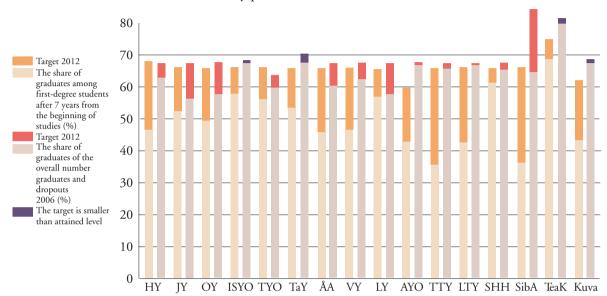
The universities will consolidate the preconditions for high-quality research, artistic activities and equal researcher career opportunities as well as their position in the international field of research. In accordance with their profile, the universities will ensure the availability of a workforce and researcher corps.

In addition to expediting studies, the development and internationalisation of the researcher career are among the focus areas for universities in 2010–2012. The aim is that an increasing number of individuals with doctorates would find a place in the enterprise sector or in the general world of work instead of in academic work communities. A key means to developing the attractiveness of a researcher career as a career option is to increase two-way mobility between the university research staff and business community and research institutes.



The development of the researcher career aims at making it more transparent and predictable. The Ministry of Education, the Academy of Finland and the universities are implementing an action programme to develop researcher education and the researcher career in 2007–2011. As part of the action programme, the universities will adopt a four-tier researcher career model. The four-tier researcher career system aims to promote and consolidate two-way mobility between the universities and other actors, research institutes, enterprises and public administration, by, for example, reforming the validation of merits acquired outside academic work by utilising the qualifications criteria in the system. The four-tier system also provides enterprises and research institutes with tools to examine their own office structures.

In the 2010–2012 agreement period, an indicator target describing the research intensity of the university has been set for the universities' scientific postgraduate education, in which the productivity of doctoral education is proportioned in the form of completed doctoral degrees to the number of professors in the university. Moreover, the effectiveness of university education and researcher education is studied with the average field-specific attainment figures of doctoral degree targets set for the agreement period.



Universities: Study processes

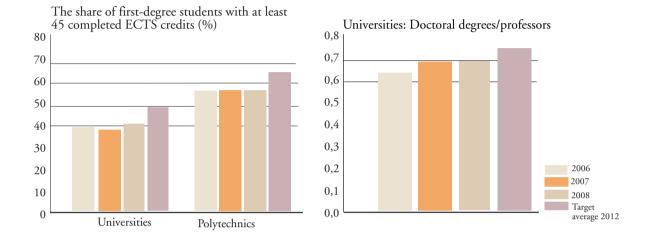
3.3 Research, development and innovation activities

The universities and polytechnics are the foundation of the innovation system. The higher education institutions take an active role in society. Enterprises, work communities and authorities are interested in taking part in the development of the higher education institutions and utilise their competence.

The universities will consolidate the preconditions for high-quality research, artistic activities and equal researcher career opportunities as well as their position in the international field of research.

The polytechnics will consolidate teaching and entrepreneurship linked with the world of work, artistic activities and regional needs and in particular research and development linked with the development of enterprises, work communities and the third sector.

As in many other countries, there are significant ongoing research, innovation and education policy reforms in Finland, which aim for their part to support the development of the European research area and the success of Finnish higher education institutions in international competition. The aim is to develop the higher education and research system so that high quality will be the key competitive edge and enabler of top-level international partnerships.



The Government gave its report on innovation policy to the Parliament in autumn 2008. The aim of the report on the national innovation strategy aims to meet the challenges presented by the ageing population, globalisation, climate change and sustainable development by ensuring the quality, international competitiveness and attractiveness of the Finnish innovation environment. In addition to top-level competence, the consolidation of internationalism, activation of users and customers in innovation activities and wide-ranging promotion of creativity and innovations are means to strengthen Finnish innovation activities.

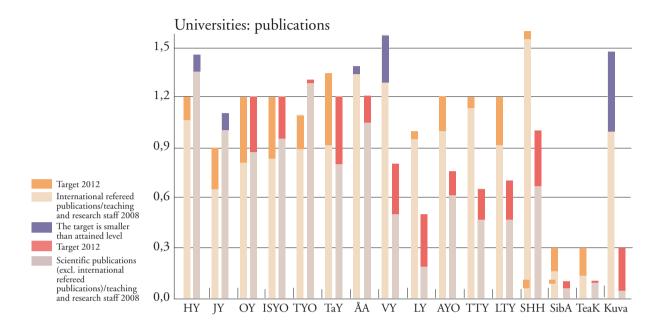
As part of the implementation of the national innovation strategy, an extensive international evaluation of the Finnish innovation system to recognise possible reform needs will be completed in autumn 2009. To this end, the Ministry of Education has also appointed a committee to study the research, development and innovation activities of polytechnics and their position within the innovation system.

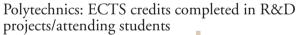
In accordance with the policies issued by the Science and Technology Policy Council in 2006, the Government launched, and funds, in collaboration with the business sector, Strategic Competence Clusters (SHOK) of science, technology and innovation activities. The Strategic Competence Clusters help in allocating new and current funding, human and other resources to targets that are important for enterprises. The clusters aim to ensure Finnish competitiveness in the long run.

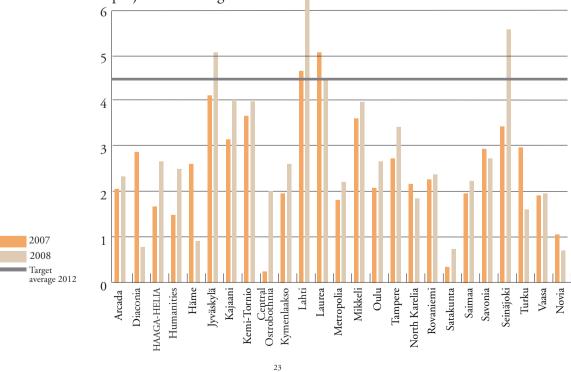
Key competence areas are energy and the environment, metals and engineering, the forest cluster, health and well-being, and the information and communications industry and services. The SHOKs offer a new means of close cooperation for high-level research units and enterprises utilising research outputs. Clusters, operating either in one place or in networks, implement the research plans defined in collaboration with enterprises and research units. Universities and polytechnics take part in these application-based and multidisciplinary clusters.

The implementation of the charting and development project of national research infrastructures began in 2009. The project charted the national-level research infrastructures and existing commitments with international research infrastructures and drew a roadmap of new infrastructure needs.

In the 2010–2012 agreement period, the comparing universities' scientific publications and internationally refereed publications with the teaching and research staff is indicative of the research intensity and quality of







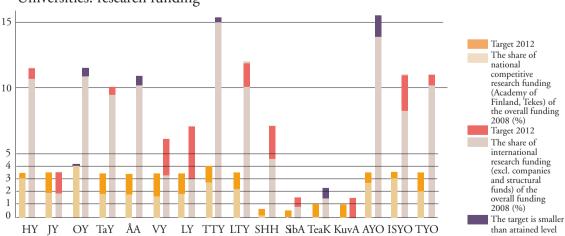
the staff of each university. The number of internationally refereed publications in particular demonstrates the quality of research activities. In the polytechnic sector, the publication activities of the full-time teachers and R&D staff are monitored by comparing the number of publications by the aforementioned staff with the overall number of staff.

A dimension of quality assurance is intrinsic to competed funding. A university's or polytechnic's ability to attract competed research funding from the Academy of Finland or Tekes positions higher education institutions at national level. Particularly in the university sector, the universities' opportunities to participate in Tekes's technology-oriented programmes are not equal due to differences in the discipline structure (e.g. universities of art and design).

The share of internationally competed research funding in the overall funding of a university is indicative of the quality and the internationalisation level of the university, for example, in the form of participation in international research consortia. The indicator of international research funding does not take into account funding through structural funds because, depending on the region, higher education institutions' opportunities to utilise structural funding instruments vary.

Polytechnics' R&D projects are one indicator of the polytechnics' ability to meet the service task in their region. R&D projects provide higher education institutions with income from research and development activities but also affect positively the working life relevance of the education. The 2010–2012 agreement period indicator compares the ECTS credits acquired in R&D projects with the number of attending students and thus measures the students' links with the R&D projects of their polytechnic as well as contact with the world of work acquired through the projects.

As a starting point of the agreement period, the universities have set a high target for the increase of their international research funding (2.6 > 3.5). This can be interpreted as a show of confidence by the universities in the opportunities afforded by the new Universities Act with regard to internationalisation activities.



Universities: research funding

3.4 Internationalisation

The higher education institutions will develop their activities as international and attractive learning and research communities. The higher education institutions will profile themselves internationally in their expert areas and shoulder their responsibility in solving global problems.

Internationalisation of the higher education institutions is a key focus area during the 2010–2012 agreement period. The aim is for Finland to have an increasingly strong, high-quality and internationally attractive higher education system, high-quality researcher education and a researcher corps, and world-class research environments.

During 2008, the Ministry of Education prepared, in extensive stakeholder cooperation, a higher education internationalisation strategy which aims to respond to changes in the international operating environment and challenges presented by the multiculturalisation of society as well as to support the measures taken by the higher education institutions with regard to strengthening internationalisation.

The aim of the measures presented in the higher education internationalisation strategy is to create in Finland a genuinely international, strong and attractive higher education and research community, which promotes society's ability to function in an open international environment, supports the balanced development of a multicultural society and shoulders the responsibility for solving global problems. The internationalisation of Finnish higher education institutions promotes the quality of higher education and research. In addition to the internationalisation strategy, the renewal of higher education structures and processes – the structural development and reform of the Universities Act – aims at a genuinely international higher education community, which is a high-quality and attractive partner for international actors.

Agreements between the higher education institutions and the Ministry of Education set higher education institution-specific quantitative objectives for student mobility. The objectives set aim at increasing the number of incoming and outgoing students to and from Finland on student exchanges exceeding three months in duration. The attractiveness of Finnish higher education institutions is also studied through objectives set for the number of international degree students.

The internationalisation agreement indicator for the 2010–2012 period, examines the periods of international mobility of teachers and researchers in each higher education institution (in the university sector, periods exceeding 2 weeks; in the polytechnic sector, periods exceeding 1 week) in proportion to full-time teachers and research and development staff.

As a starting point, the staff mobility in the polytechnic sector is more comprehensive than in the university sector. The objectives set by the polytechnics for staff mobility (on average 1.08) for the year 2012 are also significantly higher than the target level set by the universities (on average 0.32)

3.5 Social impact of higher education institutions

The universities and polytechnics are the foundation of the innovation system. The higher education institutions take an active role in society. Enterprises, work communities and authorities are interested in taking part in the development of the higher education institutions and utilise their competence.

The universities and polytechnics will increase their cooperation with other actors in the world of work and innovation system. The needs of the regions and the world of work are met primarily by developing adult education. The higher education institutions will take an active role in the preparation of regional strategies and regional development. The higher education institutions will promote the commercial and social utilisation of their research findings and competence as well as their innovation services.

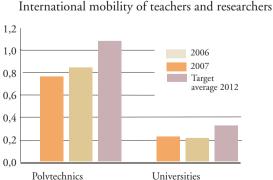
In accordance with their profile, the universities will ensure the availability of a workforce and researcher corps.

The Finnish higher education system comprises two mutually supplementary sectors, in which universities and polytechnics have different tasks and profiles. The universities focus on scientific research and education based on it, while the polytechnics are mainly multidisciplinary and regional higher education institutions, whose activities emphasise connections with the world of work and regional development.

The key is to strengthen the effectiveness of higher education institutions. The agreement indicator set for the universities describing the share of supplementary funding of the total funding of the university aims to assess through the development of outside funding how interesting a cooperation partner the higher education institution is to the surrounding society. A corresponding indicator in the polytechnic sector is formulated as the proportion of fee-based service activities of the overall internal financing of the polytechnic.

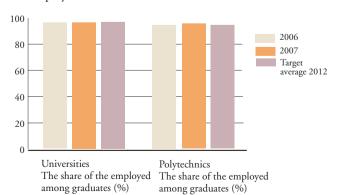
The production of a competent workforce is the most far-reaching form of social interaction. Foresight work done in extensive stakeholder cooperation aims to produce a quantitative and qualitative convergence with the needs of working life. The working life orientation of higher education and the relevance of competence produced by education are assessed by the agreement indicator describing the share of the employed in the overall number of graduates.

At the beginning of the agreement period, the employment of university graduates is at a better level than that of polytechnic graduates. However, in the university sector differences between prospective employments are significant – employment is most secured in the fields that provide a qualification to a definite profession, such as a physician or dentist. The lowest employment rates are to be found among graduates of arts universities.



(International mobility of teachers and researchers (min. 1 week)/full-time teacher and R&D staff)





Employment

4 Funding of higher education institutions

The next agreement between the Ministry of Education and higher education institutions will be negotiated for the years 2010–2012. From 2013 onwards, the aim is to switch to four-year agreement periods. The Ministry of Education will make the funding decisions annually. The agreement negotiations between the Ministry of Education and the higher education institutions will be held the year preceding the agreement period. During the agreement period the negotiations will be held and funding reviewed only when needed. In the years when negotiations are not held, the Ministry of Education will provide the higher education institutions with written feedback.

4.1 University funding scheme

State funding for university expenditure is determined on the basis of a formula according to the same principles for all universities. The aim is that during the 2010–2012 period, the mutual funding relations between universities are not radically changed and that in the longer run the profitability of the activities will be reflected in the funding received by an individual university.

Performance-based funding and separate discretionary project funding of the previous agreement periods will no longer be available. The performance perspective will be taken into account in the allocation criteria of funding instead of separate performance-based funding. Supporting the internal development projects in the universities will remain at the discretion of the universities. The point of departure is that the university will take care of the expansion and redirection of the educational range offered within the framework of the overall funding through internal structural development. The agreed project funding for 2010 or subsequent years will be taken care of in full in 2010. At the beginning of the agreement period, after having consulted the universities, the Ministry of Education decides on the national special duties and State funding share to be allocated to them.

From 2010 onwards, the university funding is allocated to the universities. In accordance with the Government Programme, the funding model emphasises the importance of quality and effectiveness and the weight of research has been added in proportion to education. In education, the relative weight of quality and effectiveness is less than that for research so that the educational resources of all universities can be ensured. The funding is allocated as one lump sum, which as a rule comprises the following calculation elements:

Formula-based c	Other education	
to the quality,	and science policy	
of the ac	objectives 25%	
Education 55% Extent of activities 85% Quality and impact 15%	Research and researcher education Extent of activities 75% Quality and impact 25%	Education and discipline structure 75% Strategic development 25%

The share of formula-based core funding related to the quality, extent and effectiveness of the activities and other education and science policy objectives and the formula-based core funding related to the education and discipline structure will be calculated by the Ministry of Education.

A total of 94% of the overall funding to the universities is formula based. In addition, the State funding includes a strategy funding share (6%) which corresponds with regard to its amount to the project funding of the previous funding models.

The point of departure for the strategy funding is the strategy work done in the universities. The condition for funding based on strategy work is that the strategies adopted take into account national education and science policy objectives which have been set for the development of education and research by the Parliament and the Government. During the 2010–2012 period, key development targets are the development of researcher careers and internationalisation. Ministry of Education policies are included in the Ministry of Education action programme for fostering researcher education and researcher careers for 2007–2011 and the higher education internationalisation strategy programme.

The strategy funding will be agreed upon in negotiations between the Ministry and the university on the basis of the university strategy, differentiating profiling, consolidation of focus areas and refocusing. The agreement will include a few key strategic focus areas, on which the Ministry of Education funding decision is particularly based.

4.2 Polytechnic funding scheme

The State funding for 2010 is based on the number of students in 2009. The formula for polytechnic funding is to be changed in conjunction with the reform of the Government subsidy system from 1 January 2010 by amending section 19 a of the Decree on the Financing of the Provision of Education and Culture (Asetus opetus- ja kulttuuritoimen rahoituksesta 806/1998) so that the number of students is agreed upon by field without making a distinction between youth and adult education.

The educational field-specific overall number of students includes youth and adult education leading to a polytechnic degree, education leading to a polytechnic Master's degree, specialisation studies, open polytechnic education, teacher training, as well as preparatory education for immigrants.

Government	State subsidy	
(unit price x num	€24 million	
€849 mil	2009	
70% (€594 million) o on the basis calculated number of students o number of students determined by field of study Discretionary ra	30% (€255 million) • on the basis of completed degrees • 2-year average uise of unit price	Project funding approx. €20 million Performance-based funding €4 million

Core funding

Even though agreeing upon degree targets was introduced as a new element to the steering of polytechnics, degree targets do not affect the funding of polytechnics in the 2010–2012 agreement period.

The Ministry of Education will make an initial proposal on the field-specific number of polytechnic students for 2010–2012 on which the funding will be based. The polytechnics will then make more specific proposals on the basis of the Ministry of Education's initial proposal. When monitoring the formula-based and realised numbers of students the Ministry of Education will take into account youth and adult education leading to a polytechnic degree, education leading to a polytechnic Master's degree, vocational specialisation studies, open polytechnic education, teacher training, as well as preparatory education for immigrants.

Project funding

The Ministry of Education will support development targets emerging in the strategy work of polytechnics with project funding during the 2010–2012 agreement period. On average, 20 million euro of project funding will be allocated annually. The polytechnics will make their project funding proposal in two project categories: research and development and other development projects supporting the strategy of the polytechnic (with a focus on the promotion of internationalisation, structural development and support of study processes). It is possible to make three project proposals in the latter category.

The maximum number of project proposals is four. With respect to the projects supporting the polytechnic's strategy, the proposal should spell out what part of the strategy the project promotes. The projects must also contribute to the attainment of the common objectives of the higher education institutions.

Performance-based funding

The Ministry of Education will reserve annually a total of 4 million euro of performance-based funding for polytechnics that have succeeded best in the evaluation performed on the basis of performance criteria. The criteria for performance-based funding are included in the goals and indicators of the agreement.

The Finnish Higher Education Evaluation Council will make its proposal for the centres of excellence in polytechnic education for 2010–2012 in November 2009. The Ministry of Education will grant annually in all 3 million euro of performance-based funding to polytechnics that have succeeded well in the centre of excellence evaluations.

		ister's grees	D	octorates		chelor's egrees	inte	umber of ernational degree tudents	or incon student (duratio	r of outgoing ning exchange ts in Finland n of exchange 3 months)	pupil train	umber of s in teacher ing schools	supe train	mount of rvised teacher ing in teacher ning schools
		Target		Target		Target		Target		Target		Target		Target
		2010-2012		2010-2012	2008	2010-212	2008	2010-2012	2008	2010-2012		2010-2012	2008	2010-2012
HY	4 4 4 2	2 615	446	434	3 905	2 780	1 246	2 000	1 747	2 200	1 440	1 440	6 673	7 500
JY	2 104	1 455	118	132	1 324	1 220	449	650	893	950	934	970	5 647	6 200
OY	1 545	1 570	123	158	1 246	1 280	331	600	797	900	$1\ 074$	1 120	6 337	6 100
ISYO	1 960	1 400	152	159	701	610	458	600	740	900	1 263	1 260	5 624	5 900
TYO	2 320	1 595	141	164	1 319	1 450	387	550	940	935	1 061	1 060	6 896	7 200
TaY	1 993	1 1 2 0	121	115	1 201	1 100	476	700	811	850	893	900	3 925	3 800
ÅA	850	581	56	71	701	610	360	450	396	425	814	810	2 100	4 100
VY	784	435	15	21	321	450	236	300	363	400				
LY	661	440	25	24	338	500	60	200	345	375	354	360	1 071	1 220
AYO	2 192	1 710	175	199	945	1 400	1 146	1 550	1 397	1 700				
TTY	809	870	64	75	63	790	391	550	661	750				
LTY	770	615	40	41	234	350	299	350	334	375				
SHH	517	250	14	15	114	175	186	200	220	250				
SibA	301	150	14	11	231	110	116	190	104	130				
TeaK	120	55	2	3	66	30	20	20	25	25				
KuvA	70	32	1	2	53	20	34	40	26	35				
Total	21 825	14 893	1 527	1 624	13 8 77	13 815	6 195	8 950	9 799	11 200	7 833	7 920	38 273	42 020

\mathbf{O}	c ·	• •	2010 2012
Quantitative targets	of univ	ersities	2010-2012

Indicator targets of universities 2012

	Basic s	studies						Study	processes		
		Students/ teachers		ster's teaching arch staff	with	of students at least S credits (%)		within the begin	e of graduates 7 years from nning of first- studies (%)	of the gradu	of graduates e total of lates and outs (%)
HY JY OY ISYO TYO TaY ÅA VY LY AYO TTY LY SHH SibA TeaK KuvA Average	2008 Tau 9,18 8,79 7,66 8,41 9,17 10,41 6,81 14,50 13,59 7,16 7,22 7,21 14,87 5,85 6,94 8,61 8,39	rget 2012 8,00 8,70 7,80 8,20 8,50 9,00 7,80 12,00 10,00 7,20 7,00 7,00 14,00 5,50 7,00 8,20 8,23	2008 Ta 1,74 1,94 1,42 1,66 1,61 2,11 1,46 3,86 2,72 1,15 0,83 1,52 5,33 1,88 2,73 3,04 1,64	rget 2012 1,15 1,46 1,13 1,19 1,17 1,48 1,10 2,53 1,84 0,94 0,84 1,19 3,37 1,29 1,65 2,12 1,08	2008 T 35,2 45,3 39,4 50,2 43,7 39,7 39,8 36,8 40,6 32,9 34,5 37,9 36,3 43,1 46,6 75,2 39,2	arget 2012 50,0 47,0 45,0 50,0 45,0 50,0 55,0 46,60	HY JY OY ISYO TYO TaY ÅA VY LY AYO TTY LY SHH SibA TeaK KuvA Averag	2007 46,7 52,3 49,6 57,8 56,1 53,7 46,0 46,7 57,5 43,2 35,8 42,4 61,5 36,1 68,8 43,3	Target 2012 68,0 66,0 66,0 66,0 66,0 66,0 66,0 66,0		Target 2012 68,0

Societal impact									
	The sl supplement	nare of ary funding		ne share of employed					
	of total fu	nding (%)	of gr	aduates (%)					
	2008 Tai	rget 2012	2007	Target 2012					
HY	36,3	40,0	97,2	96,5					
JY	29,6	40,0	94,2	96,0					
OY	29,0	35,0	94,5	96,0					
ISYO	31,9	40,0	95,7	96,0					
TYO	29,2	40,0	95,6	96,0					
TaY	35,6	40,0	94,6	96,0					
ÅA	35,4	40,0	97,1	98,0					
VY	19,2	30,0	95,4	96,0					
LY	20,0	40,0	94,3	96,0					
AYO	38,9	40,0	98,2	98,0					
TTY	34,9	45,0	97,9	98,0					
LTY	35,3	45,0	97,9	96,0					
SHH	28,4	30,0	98,4	96,0					
SibA	9,3	13,0	98,9	95,0					
TeaK	6,1	8,0	91,4	80,0					
KuvA	2,9	7,0	76,5	80,0					
Average	33,0	39,2	96,2	96,5					

Scientific postgraduate education							
	Doctora	tes/					
	professor	s					
	2008 Ta	rget 2012					
HY	0,97	0,90					
JY	0,62	0,75					
OY	0,62	0,70					
ISYO	0,62	0,75					
TYO	0,54	0,70					
TaY	0,72	0,70					
ÅA	0,56	0,70					
VY	0,31	0,50					
LY	0,45	0,50					
AYO	0,62	0,75					
TTY	0,50	0,70					
LTY	0,65	0,65					
SHH	0,45	0,50					
SibA	0,56	0,40					
TeaK	0,56	0,40					
KuvA	0,10	0,25					
Average	0,67	0,73					

		Inter	nation	alisation							
	(excl. internations)	publications itional refereed)/teaching and ich staff	public	national refereed cations/teaching research staff	natio research of Finland	Percentage of onal competitive funding (Academy d, Tekes) of the overall	resear compo funo	age of international rch funding (excl. orate and structural ds) of the overall	and resea	rchers (n	lity of teachers nin. 2 weeks)/ search staff
	2008 To	rget 2012	2008	Target 2012	2008	of the university (%) Target 2012	2008	ing of university Target 2012		2008	Target 2012
HY	1,06	1,20	1,45	1,35	10,7	11,5	3,2	3,5	HY	0,17	0,35
JY	0,66	0,90	1,10	1,00	1,9	3,5	1,9	3,5	JY	0,25	0,30
OY	0,81	1,20	0,87	1,20	11,5	10,5	4,2	4,0	OY	0,23	0,30
ISYO	0,83	1,20	0,95	1,20	8,3	11,0	3,0	3,5	ISYO	0,11	0,20
TYO	0,89	1,10	1,28	1,30	10,2	11,0	2,0	3,5	TYO	0,30	0,35
TaY	0,92	1,35	0,80	1,20	9,5	10,0	1,9	3,5	TaY	0,14	0,30
ÅA	1,39	1,35	1,04	1,20	11,0	10,5	1,9	3,5	ÅA	0,32	0,30
VY	1,58	1,30	0,50	0,80	3,1	6,0	1,7	3,5	VY	0,20	0,30
LY	0,95	1,00	0,19	0,50	3,0	7,0	1,9	3,5	LY	0,10	0,30
AYO	0,99	1,20	0,61	0,75	15,8	14,0	2,7	3,5	AYO	0,28	0,35
TTY	1,14	1,20	0,47	0,65	15,2	15,0	2,7	4,0	TTY	0,27	0,45
LTY	0,91	1,20	0,47	0,70	10,0	12,0	2,2	3,5	LTY	0,07	0,20
SHH	1,54	1,60	0,67	1,00	4,5	7,0	0,2	0,7	SHH	0,26	0,30
SibA	0,13	0,30	0,06	0,10	0,9	1,5	0,0	0,5	SibA	0,01	0,50
TeaK	0,16	0,30	0,09	0,10	2,2	1,5	0,0	1,0	TeaK	0,52	0,45
KuvA	1,48	1,00	0,04	0,30	0,0	1,5	0,0	1,0	KuvA	0,39 0,21	0,30
Average	0,95	1,17	0,94	1,06	10,90	11,20	2,60	3,50	Average	0,21	0,32

isation

	Polytechnic degrees		,			ofessional teacher training	int	Number of international degree students		Number of outgoing or incoming exchange students in Finland (duration of exchange over 3 months)		
		Target		Target		Target		Target		Target		
	2008	2010-2012		2010-2012	2008	2010-2012	2008	2010-2012	2008	2010-2012		
Arcada	317	339	1	25			273	350	88	200		
Diaconia	615	602	30	37			105	165	151	200		
HAAGA-HELIA	1 429	1 592	40	115	257	295	870	1 050	709	750		
HUMAK	229	294	11	30			4	10	81	80		
HAMK	871	988	58	85	422	390	316	350	329	400		
Jyväskylä	1 054	1 137	48	154	372	380	226	350	459	500		
Kajaani	322	339	9	25			97	100	114	120		
Kemi-Tornio	402	425	9	70			309	270	111	90		
Central												
Ostrobothnia	479	542	15	43			414	390	242	260		
Kymenlaakso	669	666	1	50			164	280	216	280		
Lahti	802	840	36	57			209	300	324	350		
Laurea	1 203	1 336	40	105			314	550	394	460		
Metropolia	2 083	2 270	102	150			649	900	553	755		
Mikkeli	711	824	14	76			167	220	182	220		
Oulu	1 162	1 194	17	70	200	215	231	315	392	440		
ТАМК	1 555	1 622	68	200	268	235	249	360	623	700		
North Karelia	595	654	16	55			73	90	203	230		
Rovaniemi	472	470	19	45			173	150	217	250		
Satakunta	904	870	40	75			54	100	304	385		
Saimaa	498	537	6	47			175	260	259	260		
Savonia	1 128	1 085	25	100			318	450	373	380		
Seinäjoki	722	786	32	45			89	180	330	370		
Turku	1 793	1 591	38	70			328	400	522	670		
VAMK	470	487	4	40			389	400	185	190		
Novia	466	571	2	29			98	230	112	250		
Total	20 951	22 061	681	1 798	1 519	1 515	6 294	8 220	7 473	8 790		

Quantitative targets of polytechnics 2010-2012

	Basic	c studies					
		tudents/ eachers		Degrees/ teachers	Share of students with at least 45 ECTS credits (%)		
	2008	Target 2012	2008	Target 2012	2008	Target 2012	
Arcada	17,19	16,05	3,14	3,50	52,4	61,0	
Diaconia	13,53	15,15	3,48	3,60	64,9	65,0	
HAAGA-HELIA	19,10	18,50	3,83	4,00	48,1	61,0	
HUMAK	11,13	13,00	2,56	3,50	53,3	61,0	
HAMK	16,75	16,10	3,11	3,60	49,1	65,0	
Jyväskylä	18,04	16,30	3,96	3,70	54,4	61,0	
Kajaani	15,40	16,30	3,18	3,50	59,1	64,0	
Kemi-Tornio	17,65	16,30	3,15	3,50	56,9	63,0	
Central Ostrobothnia	ı 16,50	16,70	3,21	3,90	48,5	61,0	
Kymenlaakso	16,83	16,30	3,55	3,50	57,0	63,0	
Lahti	16,02	15,00	3,41	3,70	51,2	62,0	
Laurea	20,98	19,50	4,26	4,60	52,5	65,0	
Metropolia	16,35	16,20	3,33	3,60	55,0	65,0	
Mikkeli	18,90	17,20	3,94	4,40	55,7	60,0	
Oulu	14,82	15,75	2,95	3,60	53,5	62,0	
TAMK	16,91	16,40	3,68	3,70	59,0	64,0	
North Karelia	13,67	14,50	2,76	3,40	53,3	61,0	
Rovaniemi	17,45	17,00	3,51	3,50	50,6	65,0	
Satakunta	14,92	15,95	3,18	3,40	53,3	60,0	
Saimaa	16,39	16,00	3,56	4,00	61,6	65,0	
Savonia	16,53	16,05	3,73	3,70	61,1	65,0	
Seinäjoki	17,16	17,00	3,48	3,50	56,1	62,0	
Turku	16,41	15,50	4,09	3,60	53,4	60,0	
VAMK	16,99	17,00	3,04	3,60	50,7	61,0	
Novia	14,62	14,05	2,59	3,50	54,6	62,0	
Average	16,58	16,38	3,46	3,72	54,3	62,7	

Indicator targets of polytechnics 2012

Study processes					Societal impact					
	The share of graduates within 5 years from the beginning of studies (%)		The share of graduates of the total of graduates and dropouts (%)			from fee of to from op	tre of Income -based services tal income perations (%)	ices The share of the employed amon %) graduates (%)		
					Amanda		Target 2012	2007	1arget 2012 98,0	
		Target 2012		Target 2012	Arcada Diaconia	5,3 5,1	10,0	99,0 97,7	98,0 96,0	
Arcada	47,7	60,0	63,4	73,0	HAAGA-HELIA	- /	7,0	97,7 97,6	96,0 95,0	
Diaconia	81,7	80,0	77,9	82,0	HUMAK	4,1 5,8	8,0	97,6 92,9	95,0 92,0	
HAAGA-HELIA		62,0	64,0	67,0	HAMK	22,9	10,0 23,0	92,9 96,7	92,0 95,0	
HUMAK	67,2	70,0	68,9	75,0	Jyväskylä	18,1	23,0 18,0	96,7 94,4	95,0 95,0	
HAMK	58,2	70,0	63,7	75,0	Kajaani	16,1	16,0	94,4 91,6	93,0	
Jyväskylä	63,9	70,0	68,5	75,0	Kajaani Kemi-Tornio	14,9	18,0	91,6 89,1	92,0	
Kajaani	63,3	67,0	69,5	70,0	Central	13,6	18,0	09,1	0),(
Kemi-Tornio	64,3	67,0	63,6	70,0	Ostrobothnia	25,5	23.0	93,7	95,0	
Central		(5.0	(0 (70.0	Kymenlaakso	16,5	23,0 18,0	94,6	95,0	
Ostrobothnia	56,7	65,0	69,6	70,0	Lahti	17,6	20,0	96,2	96,0	
Kymenlaakso Lahti	58,0	62,0	68,5	71,0	Laurea	5,6	20,0 9,0	98,2	97,0	
	58,7	65,0	70,3	75,0	Metropolia	5,2	8,0	97,4	97,0	
Laurea	58,1	65,0	69,1	70,0	Mikkeli	34,1	30,0	92,6	92,0	
Metropolia Mikkeli	56,1	71,0	58,1	72,0	Oulu	13,2	18,0	94,1	93,0	
Oulu	66,1 56,5	70,0 65,0	72,9 62,2	74,0	ТАМК	9,8	13,0	95,2	95,0	
ТАМК	56,5 61,5		62,2 70,8	71,0	North Karelia	15,4	16,0	89,4	90,0	
North Karelia	63,5	66,0 67,0	70,8 61,8	72,0 72,0	Rovaniemi	20,8	20,0	93,1	90,0	
Rovaniemi	65,5 57,4	67,0 63,0	64,2	65,0	Satakunta	8,5	11,0	94,7	94,0	
Satakunta	55,2	65,0	56,4	63,0 64,0	Saimaa	12,3	14,0	93,8	90,0	
Saimaa	55,2 65,7	70,0	74,3	75,0	Savonia	21,2	15,0	93,5	93,0	
Savonia	64,1	70,0	69,9	68,0	Seinäjoki	14,2	18,0	94,9	90,0	
Seinäjoki	68,5	70,0	70,1	72,0	Turku	6,4	9,0	95,5	95,0	
Turku	56,8	68,0	69,0	72,0	VAMK	8,7	11,0	95,8	95,0	
VAMK	53,1	65,0	59,0	70,0	Novia	10,9	14,0	97,9	97,0	
Novia	54,9	65,0	62,0	70,0	Average	13,2	14,7	95,2	94,	
Average	59,8	67,2	64,7	71,1		- ,-	,,)-	

	Rese	arch activi	ties				Internationalisation			
	Publications/ full-time teachers and R&D staff		ECTS credits in R&D projects/ attending students		Percentage of national competitive research funding (Academy of Finland, Tekes) of the		International mobility of teachers and researchers (min. 1 week)/full-time teachers and R&D staff			
						funding of the rtechnic (%)		2008	Target 2012	
	2008	Target 2012	2008	Target 2012	2007	Target 2012	Arcada	1,06	1,60	
Arcada	0,33	1,00	2,32	3,50	0,0	0,7	Diaconia	0,62	1,00	
Diaconia	0,62	0,52	0,78	3,50	0,0	0,6	HAAGA-HELIA	1,32	1,10	
HAAGA-HELIA	0,62	1,00	2,65	3,30	0,0	0,0	HUMAK	0,57	1,00	
HUMAK	0,90	0,70	2,48	3,30	0,1	0,5	HAMK	0,70	1,00	
HAMK	0,36	0,70	0,91	5,00	0,0	1,0	Jyväskylä	2,39	2,50	
Jyväskylä	1,12	1,20	5,03	4,80	0,0	0,6	Kajaani	0,67	0,80	
Kajaani	0,28	0,40	3,99	3,70	0,0	1,0	Kemi-Tornio	0,60	0,80	
Kemi-Tornio	0,20	0,40	3,96	4,10	1,7	1,0	Central			
Central	0,91	0,92	5,70	4,10	1,/	1,0	Ostrobothnia	0,66	1,00	
Ostrobothnia	0,23	0,45	2,00	3,00	1,5	1,5	Kymenlaakso	0,45	1,00	
Kymenlaakso	0,35	0,45	2,59	3,50	0,2	0,8	Lahti	0,60	1,00	
Lahti	0,60	0,65	6,18	6,00	0,0	0,6	Laurea	0,43	1,00	
Laurea	0,47	0,80	4,48	8,00	0,3	1,0	Metropolia	0,64	1,10	
Metropolia	0,36	0,52	2,20	6,00	0,4	1,0	Mikkeli	0,71	1,00	
Mikkeli	0,77	1,00	3,95	7,00	2,2	3,5	Oulu	0,67	1,00	
Oulu	0,33	0,52	2,65	3,50	0,4	1,0	ТАМК	1,50	1,40	
ТАМК	0,38	0,60	3,40	3,30	0,2	0,8	North Karelia	0,69	1,00	
North Karelia	0,61	0,70	1,84	3,30	1,0	1,2	Rovaniemi	0,74	1,00	
Rovaniemi	0,19	0,40	2,36	3,50	0,3	1,0	Satakunta	0,29	0,35	
Satakunta	0,19	0,35	0,73	2,50	0,4	0,8	Saimaa	0,76	1,10	
Saimaa	0,55	1,20	2,22	3,50	0,4	0,8	Savonia	0,89	1,00	
Savonia	0,41	0,50	2,71	4,30	2,0	1,5	Seinäjoki	1,66	1,50	
Seinäjoki	0,59	0,52	5,54	6,00	0,9	0,6	Turku	0,48	0,80	
Turku	0,56	0,65	1,60	3,50	0,5	0,7	VAMK	0,82	1,00	
VAMK	0,90	0,67	1,95	3,00	0,0	0,6	Novia	0,69	1,00	
Novia	0,51	0,52	0,70	4,00	0,0	0,6	Average	0,84	1,08	
Average	0,49	0,62	2,8	4,42	0,6	1,0				

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Universities

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Y	1 Univers	ities	
UNIVERSITY APPLICANTS *	1 998	2003	2008
- Primary applications	84 123	110 564	159 497
- Exam candidates	66 309	68 778	94 940
- Admitted	23 529	28 176	30 484
New students	19 402	20 933	19 643
All students **	_147 062	173 732	147 938
Degrees	16 382	17 793	38 209
- Bachelor's degrees	2 623	2 883	13 876
- Master's degrees	11 343	12 411	21 825
- Doctoral degrees	988	1 257	1 526
Teaching staff	7 290	7 921	7 785
Research staff			
- Postgraduate education students	1 328	1 590	2 266
- Researchers	4 151	5 933	6 050
Other staff	13 564	13 961	14 270
BUDGET FUNDING, EXPENDITURE			
(€ MILLION) ***	9 363	1 185	1 432
Open University			
number of students	77 477	82 918	70 702
CONTINUING EDUCATION			
- number of courses	5 209	3 636	3 561
- number of students	133 622	83 685	86 084
* 1998 and 2003 are not fully commensurate wi once per university field of study, since 2005/7 to 2006 are also as a study of study and a study of			

once per university held of study, since 2005// all app
 1998 and 2003 all students, 2008 attending students
 *** Nominal values from universities' financial statements

	Y2 Universities 2008								
	New	Attending	Master's	Doctoral	Teaching	Other staff			
	students	students	degrees	degrees	staff	(budget-funded)			
					person-years	person-years			
Total	19 643	147 938	21 825	1 526	7 785	12 243			
HY	3 596	31 808	4 442	466	1 638	3 792			
JY	1 894	12 075	2 104	118	772	935			
OY	1 785	13 761	1 932	123	740	1 327			
JoY	1 180	6 655	1 207	57	374	516			
KY	805	5 323	753	95	342	745			
TY	1 693	14 329	1 899	133	774	1 201			
TaY	1 530	13 300	1 993	121	550	1 081			
ÅA	718	5 234	850	56	331	562			
VY	654	3 850	784	15	165	200			
LY	646	4 1 3 4	661	25	202	289			
TKK	1 319	12 620	995	142	531	1 469			
TTY	1 142	9 745	809	64	353	797			
LTY	885	4 793	770	40	181	328			
HKKK	543	2 942	1 002	24	164	267			
SHH	332	1 831	517	14	100	104			
TuKKK	367	1 969	421	8	125	142			
SibA	163	1 171	301	14	232	142			
TeaK	76	374	120	2	54	78			
TaiK	272	1 800	195	9	172	260			
KuvA	43	224	70		35	35			

Y3 Fields of study 2008 Teaching New Attending Master's Doctoral Other staff staff (budget-funded) person-years person-years students students degrees degrees Theology 313 2 4 7 0 315 18 79 57 Humanities 2 658 22 846 3 0 6 5 140 900 480 405 10 220 149 Art and Design 2 6 3 2 339 163 301 14 231 12 Music $1\ 171$ 85 Theatre and Dance 76 122 2 61 399 74 768 404 Education 1 967 11 831 2 568 46 Sport Sciences 151 745 181 4 37 Social Sciences 1 973 15 655 2 4 1 4 118 554 470 Psychology 159 1 7 3 9 278 23 81 64 Health Sciences 394 2 5 5 0 563 57 106 82 527 4 176 644 22 148 82 Law Economics 2 597 15 395 3 793 92 677 603 Natural Sciences 3 178 21 449 3 092 318 1 078 1 468 416 2 8 2 9 638 55 199 Agriculture and Forestry 160 274 31 043 2 708 1 186 1 897 Engineering 3 7 3 1 250 Medicine 437 7 791 510 689 900 Dentistry 71 796 69 12 90 76 Veterinary Medicine 55 599 53 16 74 118 Pharmacy 329 1 598 102 27 97 88 Fine Arts 43 224 70 35 35 Unspecified 505 4 9 3 7 1 526 7 785 Total 19 643 147 938 21 825 12 243

Students

The number of attending students in universities in 2008 was 147,983, of whom 126,274 were first-degree students. The largest number of students attended the University of Helsinki. In terms of the number of attending students, the largest fields of study were engineering (31,043), humanities (22,846) and social sciences (15,655). Compared with 2007, there were nearly 12,000 fewer first-degree students in 2008.

Applications and admissions

In 2008, a total of 159,497 applications were submitted to universities, which is nearly as many as in the previous year. Compared with 2000, there is a 40 per cent increase and, compared with 1990, an over-130 per cent increase in the number of applications. In 2008, the university entrance exams were taken by 94,940 applicants, of whom 30,484 were successful. The number of new students enrolling in universities was 19,643. The most popular universities in terms of the number of applicants were the University of Helsinki (31,589), the University of Tampere (18,087) and the University of Jyväskylä (16,820). The most popular fields of study in terms of the number of applicants (23,907) and the natural sciences (21,857).

Foreign students

The number of foreign students has grown steadily in recent years. In 2008, Finnish universities had 6,195 foreign degree students, most of whom came from Europe (3,098) and Asia (2,043). Most of the foreign students attended the University of Helsinki (1,246), Helsinki University of Technology (821) and the University of Tampere (476). In proportion to the total number of students, the largest percentages of foreign students attended the Finnish Academy of Fine Arts (15.2%), the Sibelius Academy (9.9%) and the University of Art and Design Helsinki (9.7%).

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	Y4 Attending students by university 2008								
	Bachelor's degree students	Master's degree students	Licentiate degree	Doctoral degree	Other degrees	Attending students total			
Total	85 615	40 659	2 670	16 335	2 659	147 938			
HY	20 487	5 947	284	4 2 2 7	863	31 808			
JY	7 226	3 428	174	1 247		12 075			
OY	7 736	4 183	234	1 254	354	13 761			
JoY	5 065	931	128	531		6 655			
KY	2 889	1 465	58	638	273	5 323			
TY	8 918	2 891	407	1 591	522	14 329			
TaY	8 138	2 733	140	1 642	647	13 300			
ÅA	3 378	1 094	127	635		5 234			
VY	2 744	818		288		3 850			
LY	3 329	544	56	205		4 134			
TKK	4 437	5 909	622	1 652		12 620			
TTY	3 280	5 044	286	1 135		9 745			
LTY	1 816	2 493	79	405		4 793			
HKKK	1 843	856		243		2 942			
SHH	1 359	330		142		1 831			
TuKKK	1 497	282	40	150		1 969			
SibA	644	396	30	101		1 171			
TeaK	135	190	5	44		374			
TaiK	587	1 032		181		1 800			
KuvA	107	93		24		224			

Y5 Attending students by field of study 2008 Attending Bachelor's Master's Licentiate Doctoral Other degree students degree degree degree degrees students students total 85 615 40 659 2 670 147 938 Total 16 335 2 659 Theology 1 785 2 470 352 27 306 Humanities 15 619 4 838 302 2 087 22 846 Art and Design 1 1 4 5 1 268 219 2 6 3 2 30 101 Music 644 396 1 171 Theatre and Dance 147 202 6 44 399 8 804 1 779 168 1 080 Education 11 831 404 278 745 Sport Sciences 3 60 15 655 Social Sciences 10 460 3 1 5 4 280 1 761 Psychology 1 003 230 218 288 1 739 Health Sciences 1 294 694 39 523 2 550 3 374 271 256 275 4 176 Law 10 916 3 2 2 4 15 395 Economics 69 1 186 15 936 2 600 21 449 Natural Sciences 173 2 7 4 0 1 981 2 829 Agriculture and Forestry 455 393 Engineering 10 609 15 694 1 092 3 6 4 8 31 043 Medicine 4 067 1 257 2 467 7 791 92 628 76 796 Dentistry Veterinary Medicine 225 175 83 116 599 7 Pharmacy 1 162 261 168 1 598 Fine Arts 107 93 24 224

Y6 First-degree students and new students 1990–2008									
	Students of		New		FTE calculated				
	basic studies	Women %	students	Women %	full-time	Women %			
	total		total		students of				
					basic studies*				
1990	97 418	52,5	16 013	56,1					
1991	100 870	52,9	17 150	55,7					
1992	105 953	53,1	17 662	55,7					
1993	108 189	53,2	17 331	55,6					
1994	110 894	53,2	17 289	55,5					
1995	116 327	53,5	18 679	55,4					
1996	118 618	53,4	18 465	54,0					
1997	121 703	53,2	18 660	54,6					
1998	124 991	53,1	19 402	54,4					
1999	128 594	53,3	19 373	54,8					
2000	133 230	53,6	19 919	57,7					
2001	138 256	53,7	20 651	57,1					
2002	144 306	53,4	21 013	56,0					
2003	147 085	53,5	20 933	55,9	103 523	56,6			
2004	149 167	53,5	20 420	56,5	105 929	56,5			
2005	151 030	53,8	20 786	56,5	109 539	56,6			
2006	152 165	53,9	20 150	56,5	108 641	57,0			
2007	152 198	54,0	19 648	57,4	108 245	57,2			
2008	140 558	55,4	19 643	56,0	100 943	56,4			

* First-year students and students who have completed over 30 credits (2003–2004 over 20 credits) calculated with a factor of 1, students with less than 30 credits with a factor of 0.5 and non-attending with 0.

Y7 Applications and admissions 1990–2008*								
	Applications total	Exam candidates total	Admitted total	Admitted women %				
1990	68 424	42 146	20 625	55,3				
1991	78 638	49 770	20 962	54,6				
1993	91 513	58 899	21 471	55,3				
1995	89 602	60 370	21 084	55,5				
1997	91 397	65 754	22 930	54,3				
1999	106 510	62 478	25 517	56,1				
2001	108 582	66 109	28 483	57,2				
2003	110 564	68 778	28 176	57,4				
2005	164 619	96 997	30 492	56,6				
2007	161 520	96 169	29 899	56,9				
2008	159 497	94 940	30 484	57,6				
* Data since 2005 are not fully commensurate with earlier data. Since 2005 the data include a person's all applications, entrance examinations and admissions. Previously a person was included in statistics only once per university field of education.								

Y8 Applications, admissions and new students by university 2008								
	Applicants	Exam	Admitted	New				
	total	candidates	total	students				
		total		total				
Total	161 520	96 169	29 899	19 648				
HY	31 703	18 210	5 721	3 610				
JY	17 300	8 503	3 287	1 961				
OY	16 223	9 813	2 651	1 714				
JoY	8 059	4 919	1 899	1 168				
KY	4 536	2 871	1 412	835				
ΤY	16 222	9 979	2 7 3 4	1 710				
TaY	19 288	13 186	2 454	1 591				
ÅA	3 601	1 638	1 147	686				
VY	4712	2 073	998	678				
LY	4 275	2 554	937	665				
TKK	9 434	6 413	1 911	1 415				
TTY	7 410	4 265	1 465	1 068				
LTY	3 949	1 612	1 124	793				
HKKK	3 794	2 058	679	498				
SHH	1 862	804	449	367				
TuKKK	3 620	2 546	436	364				
SibA	919	715	181	165				
TeaK	1 237	1 219	63	46				
TaiK	2 729	2 7 2 9	306	271				
KuvA	647	62	45	43				

Y9 Applications, admissions and new students by field of study 2008								
study 2000	Applicants total	Exam candidates total	Admitted total	New students total				
Total	159 497	94 940	30 484	19 643				
Theology	1 117	651	374	313				
Humanities	19 800	11 160	3 966	2 658				
Art and Design	3 011	2 804	451	405				
Music	888	781	178	163				
Theatre and Dance	1 643	1 626	79	76				
Education	28 783	19 502	3 076	1 967				
Sport Sciences	1 545	525	193	151				
Social Sciences	15 598	6 988	3 208	1 973				
Psychology	3 203	2 061	263	159				
Health Sciences	2 633	1 1 3 4	490	394				
Law	3 219	2 418	612	527				
Economics	23 907	15 498	3 543	2 597				
Natural Sciences	21 857	9 245	6 756	3 178				
Agriculture and Forestr	y 2.608	1 633	703	416				
Engineering	23 503	13 228	5 222	3 7 3 1				
Medicine	4 437	3 423	616	437				
Dentistry	662	502	146	71				
Veterinary Medicine	635	382	72	55				
Pharmacy	1 820	1 313	485	329				
Fine Arts	628	66	51	43				

Y10 Foreign students 1991–2008								
	Total	Europe	Asia	Africa	North America	Central and South America		Unknown
1991	1 899	807	575	301	143	47	9	17
1992	2 182	962	670	300	139	51	12	48
1993	2 348	1 063	731	302	135	57	11	49
1994	2 566	1 195	789	317	145	55	11	54
1995	2 759	1 348	817	316	147	68	15	48
1996	3 105	1 562	858	345	188	84	14	56
1997	3 130	1 653	814	338	188	80	13	45
1998	3 199	1 718	809	360	178	80	13	41
1999	3 473	1 953	863	325	195	81	19	37
2000	3 7 3 2	2 187	910	311	197	84	15	28
2001	4 063	2 4 2 6	977	319	187	102	19	33
2002	4 186	2 575	1 002	256	165	99	21	68
2003	4 427	2 641	1 200	261	174	105	20	26
2004	4 673	2 756	1 306	257	180	123	24	27
2005	4 949	2 869	1 377	310	200	134	26	33
2006	5 434	2 983	1 606	393	210	170	20	52
2007	5 89 7	3 094	1 813	505	212	201	28	44
2008	6 195	3 098	2 043	587	211	197	26	33

Y11 Foreign students by university 2008					
Total	6 195				
HY	1 246				
JY	449				
OY	331				
JoY	297				
KY	161				
TY	341				
TaY	476				
ÅA	360				
VY	236				
LY	60				
TKK	821				
TTY	391				
LTY	299				
НККК	150				
SHH	186				
TuKKK	46				
SibA	116				
TeaK	20				
TaiK	175				
KuvA	34				

Extension studies

In 2008, a total of 3,561 extension study courses were organised, which shows a minor decrease from 2006 (3,926). The number of attendees has also decreased to some extent since 2007, as has the number of Open University students. The greatest numbers of extension study courses were offered by the University of Helsinki (1,139), the Helsinki University of Technology (396) and Åbo Akademi University (315).

Open University

Open University education was attended in 2008 by 70,702 students, of whom 76.5 per cent were women. Compared with the previous year, the net number of students has decreased slightly, as has the computational number of full-year student places as well as the attendees in the University of the Third Age. The largest numbers of Open University students attended the University of Helsinki (15,410), the University of Jyväskylä (14,047) and the University of Tampere (6,553).

Y12 University extension studies and Open University education 2000–2008

	2000	2002	2004	2006	2008
Extension studies					
Courses total	5 198	4 079	3 515	3 926	3 561
Short (less than 5 days)	2 690	1 870	1 554	2 062	2 0 5 6
Other less than 30 credits	1 942	1 881	1 681	1 569	1 267
Specialisation studies	566	328	280	295	238
Participants	121 221	88 709	87 579	89 287	86 084
Hours total	332 904	252 907	224 221	196 025	155 438
Open University					
Students	80 002	85 075	82 318	73 972	70 702
Calculated full-year					
student places	17 516	17 732	16 623	14 461	13 465

Y13 Extension study courses by university 2008									
NUMBER OF COURSES									
	Total	Short courses	Other courses	Specialisation studies	Participants total	Hours total			
Total	3 561	2 056	1 267	238	86 084	155 438			
HY	1 1 3 9	632	454	53	23 356	41 756			
JY	187	95	62	30	6711	11 864			
OY	149	94	38	17	4 301	13 270			
JoY	167	82	75	10	3 682	11 683			
KY	77	37	19	21	2 371	8 013			
TY	218	190	16	19	7 579	4 605			
TaY	126	60	47	6	2 412	6 536			
ÅA	315	259	50	2	7 909	4 725			
VY	57	46	9	7	1 164	1 217			
LY	84	46	31	10	1 667	5 624			
TKK	396	244	142	3	8 573	16 611			
TTY	104	29	71	8	2 950	4 467			
LTY	46	23	15	23	1 340	2 645			
HKKK	241	50	168	2	6 323	13 495			
SHH	86	53	31	4	2 243	3 192			
TuKKK	30	16	10	2	940	1 505			
SibA	29	13	14	9	614	1 643			
TaiK	109	87	13		1 946	2 547			
KuvA	1		1		3	40			

Y14 Open University education 2008, by university and calculated full-year students places 2008

		Students i	n Open Univi	ERSITY			CULATED FULL-		Third-age university
	Net total	Women %	Gross total	Organised by the university	Other organiser*	Total	Self- organised	Other places	Participants, total
Total	70 702	76,5	104 248	74 227		13 465	9 159	4 306	16 025
HY	16 328	78,1	25 617	19 736	45 431	3 0 4 1	2 357	684	2 394
JY	13 840	83,5	19 192	12 934	32 209	2 998	2 007	991	5 033
OY	3 620	73,1	4 2 4 2	3 264	7 579	641	375	266	245
JoY	5 232	75,6	7 076	3 301	10 453	1 156	502	654	1 190
KY	3 080	84,7	3 889	2 619	6 593	715	412	303	1 071
ΤY	5 823	79,9	7 740	4 402	12 222	1 009	513	496	1 541
TaY	6 063	79,0	8 263	6 610	14 952	1 1 2 7	938	189	2 723
ÅA	3 522	72,3	4 1 4 1	2 586	6 799	618	392	226	311
VY	1 776	55,6	4 589	2 535	7 180	350	188	162	210
LY	3 712	73,8	4 845	2 867	7425	666	423	243	1 302
TKK	543	53,2	1 195	1 195		84	84		
TTY	694	60,7	860	860		45	45		
LTY	649	52,5	1 232	938	294	86	61	25	
HKKK	3 045	59,7	6 694	6 694		601	601		
SHH	411	69,1	778	741	37	70	66	4	5
TuKKK	767	65,4	1 543	1 543		102	102		
SibA	595	73,8	1 044	530	1 648	60	34	26	
TeaK	629	71,5	982	485	1 539	51	33	18	
TaiK	373	78,8	687	387	1 153	45	26	19	
* Adult Edu	ication Centres, Fol	lk High Schools,	Summer University	or other organiser					

Degrees

Degrees by university and field of study

In 2008, universities awarded 13,876 Bachelor's degrees, 21,825 Master's degrees and 1,526 doctorates. Compared with previous years, the increase in the number of first degrees is substantial. Owing to the degree reform, the number of Master's degrees awarded in 2008 was 8,697 higher than in 2006, and that of Bachelor's degrees three times as many. In quantitative terms, the most degrees were awarded by the University of Helsinki, the University of Jyväskylä and the University of Tampere. By field of study, the most degrees were awarded in the humanities, education, the social sciences, economics, the natural sciences and engineering.

Degree completion times and job placement

In 2008, the average degree completion time was 6.5 years in all fields of study. By field of study, the longest average completion times were in the fields of music (9 years) and the shortest in the field of health sciences (5 years).

The most recent statistics on the placement of graduates are on those who graduated in 2005. Of the 2005 graduates, 3.9 per cent were unemployed one year after the year of graduation. The highest employment success rates were among graduates of dentistry, medicine, veterinary medicine and pharmacy. Also, nearly all psychology graduates had found employment. In contrast, the employment figures for graduates from fine arts and theatre and dance were the poorest at the end of the year following the year of graduation.

	Y15 Degrees 1990–2008											
	BAC	HELOR'S	Master's		LICE	NTIATE	Doctoral		Other			
	DEC	GREES	DE	GREES	DEG	GREES	DEG	GREES	DEG	REES		
	Total	Women	Total	Women	Total	Women	Total	Women	Total	Women		
		%		%		%		%		%		
1990	841	82,6	8 423	54,1	542	31,9	490	31,6	733	57,3		
1992	789	84,5	8 713	55,0	669	34,4	527	30,6	641	57,3		
1994	975	79,5	9 615	56,4	786	37,9	698	36,2	796	52,5		
1996	1 816	71,4	10 611	57,5	738	40,4	851	40,2	785	64,3		
1998	2 623	72,9	11 343	57,5	819	45,2	988	39,7	609	58,1		
2000	2 516	73,2	11 515	58,3	748	47,2	1 1 5 6	45,2	718	57,4		
2002	2 619	73,3	12 075	58,9	654	52,3	1 224	45,9	756	59,0		
2004	2 717	73,1	12 588	60,8	558	49,1	1 399	45,2	648	63,7		
2006	3 814	72,9	13 128	60,4	489	47,6	1 409	46,8	570	63,0		
2008	13 877	69,1	21 825	62,1	425	51,8	1 527	54,5	557	66,1		

Y16 Degrees by university 2008										
				e Doctoral	Other					
		REES		GREES	DEGREES					
Total	13 876	21 825	425	1 527	557					
HY	3 904	4 4 4 2	130	446	200					
JY	1 324	2 104	49	118						
OY	1 246	1 932	31	123	87					
JoY	1 446	1 207	21	57						
KY	370	735	13	95	62					
TY	1 223	1 899	32	133	91					
TaY	1 201	1 993	36	121	117					
ÅA	701	850	18	56						
VY	321	784	7	15						
LY	338	661	8	25						
TKK	138	995	65	142						
TTY	63	809	9	64						
LTY	234	770	2	40						
HKKK	662	1 002	1	24						
SHH	114	517		14						
TuKKK	96	421	1	8						
SibA	231	301	2	14						
TeaK	66	120		2						
TaiK	145	195		9						
KuvA	53	70		1						

	Y17 De	grees by	field of	2008	Y18 Average Master's degree completion times by field of study in 2006, 2007 and 2008	
		s Master's grees		eDoctoral grees	OTHER DEGREES	(median, unit: one year)
Total	13 877	21 825	425	1 527	557	2006 2007 2008
Theology	287	315	6	18		Total 6 6,5
Humanities	3 317	3 065	56	140		Theology 7 6,5 7
Art and Design	280	339		10		Humanities 7 7 8
Music	231	301	2	14		Art and Design 6 5 7
Theatre and Dance	67	122		2		Music 7 7,5 9
Education	1 776	2 568	36	74		Theatre and Dance 4,5 4,5 6
Sport Sciences	67	181	3	4		Education 5 5 6
Social Sciences	1 914	2 414	60	118		Sport Sciences 5,5 5 6
Psychology	171	278	21	23		Social Sciences 6,5 6,5 7
Health Sciences	251	563	3	57		Psychology 6 6 7
Law	367	644	20	22		Health Sciences 4,5 4 5
Economics	1 588	3 793	11	92		Law 6 6,5 6 Economics 5,5 5,5 6
Natural Sciences	2 428	3 092	105	318		Economics 5,5 5,5 6 Natural Sciences 6,5 6,5 7
Agriculture and Forestry	353	638	4	55		Agriculture and Forestry 7 6,5 7
Engineering	344	2 708	94	274		Engineering 7 7 7
Medicine	511	510	1	250	525	Medicine 7 7 6,5
Dentistry		69	1	12	24	Dentistry $6,5$ 6 6
Veterinary Medicine	30	53		16	8	Veterinary Medicine 8 7,5 8
Pharmacy	352	102	3	27	0	Pharmacy 6 6 7
Fine Arts	53	70	5	1		Fine Arts 6 6 6

two years from graduation by university											
		MASTER'S DEGREES	Employee %	Entrepreneur %	Student %	Other %	Unemploye %	EDUNEMPLOYED AFTER 2			
								YEARS %			
Total	2000	11 489	84,7	1,2	3,9	3,5	3,3	2,8			
	2006	13 022	83,5	1,5	4,5	3,6	3,6				
HY	2000	2 367	82,8	2,2	4,6	4,7	3,0	3,0			
	2006	2 331	83,0	1,6	5,5	3,9	2,7				
JY	2000	1 078	84,5	1,5	4,4	2,6	4,3	3,2			
	2006	1 326	80,7	1,7	6,0	3,4	5,4				
OY	2000	1 118	86,0	1,2	4,7	3,1	3,0	2,6			
	2006	1 271	83,6	1,0	5,3	3,2	5,2				
JoY	2000	553	83,2	0,7	6,3	2,2	4,9	2,9			
	2006	672	82,0	1,8	4,2	3,7	5,8				
KY	2000	379	84,4	1,9	5,3	3,7	2,9	1,8			
	2006	465	82,8	1,1	8,6	2,6	2,6				
ΤY	2000	1 080	82,8	0,9	6,6	3,9	3,9	3,1			
	2006	1 099	81,8	0,8	7,2	3,0	4,5				
TaY	2000	901	82,7	1,5	4,3	3,8	4,3	3,2			
	2006	1 059	81,6	2,0	4,2	3,9	5,1				
ÅA	2000	412	76,5	0,3	3,4	6,1	3,6	2,4			
	2006	499	83,8	1,2	3,8	4,8	2,4				
VY	2000	277	87,4	1,2	2,9	2,5	3,2	1,4			
	2006	383	85,4	2,1	2,1	3,1	4,2				
LY	2000	324	86,4	1,1	2,8	1,9	6,2	3,4			
	2006	376	83,8	0,3	4,8	4,0	5,6				
TKK	2000	866	89,6	1,4	2,5	1,8	1,3	1,2			
	2006	1 001	89,6	1,5	1,9	2,3	1,0				
TTY	2000	668	93,3	1,0	1,2	1,5	2,1	1,0			
	2006	806	91,4	1,1	2,1	0,7	2,0				
LTY	2000	386	91,5	0,6	0,3	2,1	3,4	2,8			
	2006	515	91,3	0,8	0,8	1,6	1,7				
НККК	2000	349	86,0	0,7	0,9	3,4	2,0	3,4			
	2006	346	85,8	0,3	2,3	3,5	1,2				
SHH	2000	211	84,8	0,0	2,4	4,3	0,5	1,4			
	2006	234	73,1	1,3	3,4	7,7	1,3				
TuKKK	2000	177	89,3	1,3	1,1	2,3	1,1	2,8			
	2006	218	88,5	0,9	1,8	3,7	1,4				
SibA	2000	123	83,7	1,0	0,8	6,5	0,0	2,4			
	2006	178	80,9	2,2	3,9	7,3	1,1				
TeaK	2000	53	79,2	2,4	1,9	1,9	13,2	13,2			
	2006	32	62,5	6,3	3,1	9,4	9,4				
TaiK	2000	144	70,1	12,9	2,8	7,6	4,9	6,9			
	2006	181	57,5	13,3	3,3	12,7	6,6				
KuvA	2000	23	39,1		4,3	26,1	26,1	13,0			
	2006	30	43,3		3,3	33,3	13,3				

Y 19 Main occupation of Master's degree holders graduated in 2000 and 2006 at the end of the year following graduation and the unemployment rate after two years from graduation by university

Staff

Teaching staff

University teaching is based on the highest level of research. The duties of the teaching staff include both teaching and research. The number of person-years for teaching staff, excluding the computational figure for untenured teaching, was 6,773 in 2008. The number has slightly decreased from the previous year. The numbers of person-years for teaching staff are comparable as of 1998. Prior to that, the data were based on the numbers of tenured positions and posts.

The proportion of women among teaching staff has steadily increased, although the change in the number of women teachers and the pace at which this change has happened has varied depending on job descriptions. The change in the proportion of women is indicative because until 2004 the total number of women was recorded in statistics as numbers of persons, and only as of 2005 as person-years.

From 1990 onwards, the number of professors, senior assistants and lecturers has increased while the number of assistants and full-time untenured teachers has decreased.

Other staff

In 2008, the number of person-years for other staff was 22,586, which is slightly less than in 2007. Roughly one-half (12,243 person-years) of the total number of person-years were covered by budget appropriations, while the Academy of Finland funded 2,396 person-years in research, with other funding sources covering the expenses for 7,947 person-years. The largest numbers of person-years were completed at the University of Helsinki (5,868), Helsinki University of Technology (2,723) and the University of Oulu (2,097). In terms of field of study, the most labour-intensive fields were engineering (5,038) and the natural sciences (3,153). Other staff also includes research staff members.

Y21 T	eaching	staff by un	iversity	2008 (pe	rson-yea	rs)	
	With budget funding, total	Professors and associate prof.	Senior assistants	Assistants	Lecturers	Full-time teachers	Part-time teachers
Total	7 785	2 269	660	885	2 708	251	1 012
HY	1 638	478	5	123	720	55	257
JY	722	189	105	83	292		53
OY	740	198	100	120	215	53	54
JoY	374	113	56	13	138	17	37
KY	342	112	32	63	102	12	21
ΤY	774	227	74	144	259	21	49
TaY	550	167	76	36	217	4	50
ÅA	331	100	13	33	147	20	18
VY	165	48	22	24	48	8	15
LY	202	56	7	25	71	28	15
TKK	531	190	77	74	70	2	118
TTY	353	128	20	38	75	14	78
LTY	181	62	15	32	52	1	19
HKKK	164	51	16	21	37		39
SHH	100	31	16	7	31	1	14
TuKKK	125	32	22	22	39		10
SibA	232	25	4	12	111	2	78
TeaK	54	12		4	25		13
TaiK	172	40		10	51	10	61
KuvA	35	10		1	8	3	13

Y22 Teaching staff by field of study 2008

	Professors and associate professor	Senior assistants	Assistants	Lecturers	Full-time teachers	Part-time teachers	Total
Total	2 269	660	885	2 708	251	1 012	7 785
Theology	31		1	32	1	14	79
Humanities	256	40	70	436	33	65	900
Art and Design	51		13	69	22	65	220
Music	25	4	12	110	2	78	231
Theatre and Dance	13		5	29		14	61
Education	125	44	53	445	39	62	768
Sport Sciences	9	4	6	25		2	46
Social Sciences	205	68	60	150	18	53	554
Psychology	31	10	6	23	1	10	81
Health Sciences	37	12	18	33	2	4	106
Law	65	10	45	18		10	148
Economics	218	100	92	176	8	83	677
Natural Sciences	343	159	164	263	24	125	1 078
Agriculture							
and Forestry	64	10	3	55	10	18	160
Engineering	428	150	196	185	19	208	1 186
Medicine	262	30	90	271		36	689
Dentistry	25	12	11	38	2	2	90
Veterinary Medicine	21	1	12	34		6	74
Pharmacy	29	5	27	20	12	4	9 7
Fine Arts	10		1	8	3	13	35
Unspecified	21	1		288	55	140	505

			Ŋ	20 Teach	ning sta	aff 1990–	-2008 (person-y	ears)			
		F. AND		NIOR	Assistants		LEC	TURERS	FULL-TIME		PART-TIME	WITH
	ASSOCIATE PROFESSOR		ASSISTANTS						TEACHERS		TEACHERS	BUDGET FUNDING TOTAL
	Total	Women %	Total	Women %	Total	Women %	Total	Women %	Total W	Women %		
1990	1 842	13,1	523	25,8	1 834	36,1	1 770	44,2	585	51,6	1 234	7 788
1991	1 894	14	603	26,4	1 822	37,7	1 854	46,3	513	53,4	1 126	7 812
1992	1 924	15,5	629	29,1	1 808	36,4	1 854	46,3	523	62,0	1 090	7 828
1993	1 959	15,6	615	28,1	1 805	39,2	1 897	46,2	466	57,3	1 072	7814
1994	1 980	15	614	29,6	1 805	37,8	1 853	44,4	401	67,6	1 069	7 722
1995	2 0 2 3	15,9	623	27,9	1 772	40,9	1 909	47,9	341	65,1	882	7 550
1996	2 070	13,4	657	28,6	1 750	38,3	1 953	48,8	348	57,2	936	7714
1997	2 1 2 6	17,7	686	30	1 721	39,2	1 947	54,9	330	66,7	873	7 683
1998	2 011	18,4	649	30	1 530	42,7	1 891	51,0	312	59,6	897	7 290
1999	2 0 4 8	17,9	672	33,3	1 489	45,3	1 870	53,9	298	59,7	893	7 270
2000	2 106	20,1	689	36,8	1 473	52,3	1 913	58,4	277	81,2	929	7 387
2001	2 175	20,4	677	33,6	1 405	47,5	2 0 2 7	54,1	257	66,9	1 021	7 562
2002	2 195	21,2	695	36,8	1 375	48,9	2 2 1 0	54,1	238	65,5	1 123	7 836
2003	2 217	21,6	673	36,5	1 319	49,7	2 362	56,8	219	78,5	1 131	7 921
2004	2 2 4 9	22,1	643	39,3	1 230	55,4	2 488	58,6	217	72,8	1 096	7 923
2005	2 255	22,2	630	38,4	1 182	49,7	2 606	51,1	202	56,9	964	7 839
2006	2 268	23,4	693	36,6	1 1 35	51,6	2 667	51,6	200	59,5	920	7 883
2007	2 289	23,5	686	39,5	1 054	53,6	2 7 2 2	51,4	223	60,1	887	7 861
2008	2 269	24,5	660	38,9	885	57,2	2 708	52,6	251	61,0	887	7 785

Y23 Other staff 1990–2008*										
	Total	Funded from F the university budget, person- years		Academy of Finland	Other funding sources					
1990	13 174		8 025	872	4 277					
1991	13 595		8 249	972	4 374					
1992	13 770		8 1 3 4	929	4 707					
1993	14 650		8 101	1 0 2 0	5 529					
1994	22 355	7 811	7 674	1 173	5 697					
1995	15 791	8 315		1 266	6 210					
1996	17 284	8 730		1 393	7 161					
1997	17 514	9 040		1 296	7 178					
1998	19 043	9 852		1 709	7 482					
1999	19 800	10 167		1 896	7 737					
2000	19 502	10 031		2 064	7 407					
2001	20 377	10 550		2 228	7 599					
2002	21 043	10 892		2 344	7 807					
2003	21 484	11 284		2 330	7 870					
2004	21 954	11 624		2 348	7 982					
2005	22 306	11 908		2 296	8 102					
2006	22 300	11 994		2 226	8 080					
2007	22 651	11 983		2 245	8 423					
2008	22 586	12 243		2 396	7 947					

* Before 1994 posts and jobs. In 1994–1997 the calculated working hours are 30h/week, since 1998 37h/week. Since 2005 the definition has been the same as in personal data collections performed by State Treasury. A detailed definition can be found in the KOTA manual (https://kotaplus.csc.fi/online/pages/valintahelp/KOTA-kasikirja_2007.pdf)

	Y24 Other staff by university 2008 All funding sources total										
	Researchers	Doctoral students	OTHERS	Total							
Total	6 050	2 266	14 270	22 586							
HY	1 085	991	3 792	5 868							
JY	398	269	935	1 602							
OY	619	151	1 327	2 097							
JoY	158	66	516	740							
KY	322	86	745	1 153							
ΤY	492	171	1 201	1 864							
TaY	367	88	1 081	1 536							
ÅA	244	58	562	864							
VY	42	9	200	251							
LY	51	15	289	355							
TKK	1 072	182	1 469	2 723							
TTY	680	96	797	1 573							
LTY	309	35	328	672							
HKKK	96	19	267	382							
SHH	10	16	104	130							
TuKKK	65	9	142	216							
SibA	3	4	142	149							
TeaK	3	1	78	82							
TaiK	33	0	260	293							
KuvA	1	0	35	36							

Y25 Other staff by field of study 2008 All funding sources total

	Researchers	Doctoral students	OTHERS	TOTAL
Total	6 050	2 266	14 270	22 586
Theology	29	22	47	98
Humanities	232	158	423	813
Art and Design	33	2	158	193
Music	3	4	11	18
Theatre and Dance	3	2	88	93
Education	130	48	395	573
Sport Sciences	13	11	33	57
Social Sciences	403	173	411	98 7
Psychology	72	49	75	196
Health Sciences	67	27	119	213
Law	31	37	65	133
Economics	314	78	563	955
Natural Sciences	1 103	627	1 423	3 153
Agriculture and Forestry	7 109	93	214	416
Engineering	2 344	393	2 301	5 038
Medicine	455	277	1 240	1 972
Dentistry	18	7	82	107
Veterinary Medicine	24	30	180	234
Pharmacy	92	39	87	218
Fine Arts	1		35	36
Unspecified	574	189	6 320	7 083

Funding and expenditure

Appropriations

The universities' final accounts for 2008 amounted to $\in 2.17$ billion, which shows a 3.8 per cent increase on the $\in 2.089$ billion in 2007. Of the total funding, approximately two-thirds ($\in 1.43$ billion) were covered by budget funding and one-third by external funding ($\in 742$ million). Salary costs were the largest item of expenditure, comprising two-thirds of the budget funding. The largest universities in terms of final accounts were the University of Helsinki ($\in 533$ million), Helsinki University of Technology ($\in 237$ million) and the University of Oulu ($\in 195$ million). In terms of external funding also, the same universities came to the fore.

Expenditure

Data on expenditure by profit areas have been collected from all universities since 1997. The proportion of education in total funding was 36 per cent, that of research and artistic activities 55.4 per cent and that of public services 8.6 per cent. There were no significant changes in the distribution of funding in 2008 as compared with 2007.

In proportional terms, the university expending the most resources on education was the Academy of Fine Arts (82.2%), on research Helsinki University of Technology (73%) and on public service provision the University of Kuopio (16.2%). From the perspective of field of study, proportionally the most resources were expended on education, in addition to fine arts, in the field of theatre (73.0%), on research in pharmacy (70.8%) and on public service provision in art and design (11.0%).

	Y26 University appropriations 1990–2008 (€ million)										
(0		BUDGET	Г FUNDING								
	Total	Salaries	Facility	Other	External						
			costs	operating	funding						
				costs							
1990	543	380	35	125	103						
1991	685	506	40	136	208						
1992	707	518	40	144	225						
1993	653	488	42	120	267						
1994	644	476	50	111	283						
1995	765	500	132	125	316						
1996	860	535	174	149	370						
1997	892	542	183	163	401						
1998	936	576	184	175	448						
1999	977	591	189	180	523						
2000	1 016	613	194	189	564						
2001	1 047	649	212	186	604						
2002	1 123	700	228	196	645						
2003	1 185	745	241	199	639						
2004	1 235	789	256	190	690						
2005	1 262	813	262	186	694						
2006	1 318	842	273	203	696						
2007	1 347	864	278	205	742						
2008	1 432	942	284	207	742						
Final accourse rents paid are include	Final accounts data, incl. deferrable appropriations used. Facility costs include rents paid to State Real Property Agency since 1995. Construction investments are included in the overall figures until 2000.										

55

Y27 Ap	propriation	s by university	y 2008 (€1,0	00), final acco	ounts 2008
		1	Budget funding	2	
	Total	Salaries	Facility	Other	External
			costs	operating	funding
				costs	
Total	1 431 905	941 564	283 539	206 802	742 475
HY	334 742	224 015	71 207	39 520	198 330
JY	110 975	73 555	17 735	19 685	50 484
OY	135 709	92 175	27 277	16 257	59 725
JoY	64 305	43 139	12 079	9 087	18 542
KY	63 402	44 181	9 805	9 416	46 993
TY	126 801	81 542	26 174	19 085	56 447
TaY	93 701	66 925	18 992	7 784	56 351
ÅA	53 655	37 267	9 900	6 488	33 709
VY	24 487	16 893	3 972	3 622	5 822
LY	32 308	22 205	5 380	4 723	8 877
TKK	134 084	77 003	32 099	24 982	102 772
TTY	82 189	49 506	15 016	17 667	44 028
LTY	41 325	26 433	8 608	6 284	22 540
HKKK	28 711	19 175	4 826	4 710	13 856
SHH	14 941	9 597	2 483	2 861	5 933
TuKKK	17 378	11 870	2 167	3 341	7 450
SibA	25 710	17 575	3 976	4 159	2 636
TeaK	10 437	6 426	3 376	635	674
TaiK	31 350	18 740	7 011	5 599	7 134
KuvA	5 695	3 342	1 456	897	172

Y28 Appropriations by field of study 2008 (€1,000), final accounts 2008

		Bud	GET FUNDING		
	Total	Salaries	Facility	Other	External
			costs	operating	funding
				costs	
Total	1 431 905	941 564	283 539	206 802	742 475
Theology	9 050	7 345	1 247	458	2 688
Humanities	96 942	75 271	12 573	9 098	21 491
Art and Design	36 356	22 162	8 247	5 947	8 031
Music	14 121	12 743	71	1 307	1 001
Theatre and Dance	11 998	7 272	3 964	762	799
Education	81 339	60 811	14 137	6 391	11 616
Sport Sciences	6 123	4 205	726	1 192	1 921
Social Sciences	70 993	54 770	8 444	7 779	35 066
Psychology	12 113	7 993	2 043	2 077	7 671
Health Sciences	13 780	10 709	1 691	1 380	9 469
Law	15 643	12 744	2 001	898	3 921
Economics	91 967	64 978	11 987	15 002	37 549
Natural Sciences	183 051	117 925	41 097	24 029	97 927
Agriculture					
and Forestry	30 252	18 352	8 416	3 484	14 067
Engineering	221 709	148 516	42 976	30 217	183 900
Medicine	111 124	77 465	22 608	11 051	78 010
Dentistry	13 690	8 314	3 021	2 355	1 995
Veterinary Medicine	13 673	8 480	3 983	1 210	9 220
Pharmacy	13 487	9 511	2 626	1 350	7 188
Fine Arts	5 695	3 342	1 456	897	172
Unspecified	378 799	208 656	90 225	79 918	208 773

Y2	29 Extern	al funding	by univ	ersity and	funding s	source 2	008 (€1,0)00)
	Total	Academy of Finland	Tekes	Finnish companies	Other Finnish sources	EU	Foreign companies	Other foreign sources
Total	742 475	154 566	93 199	108 360	291 930	68 740	12 887	12 793
HY	198 330	48 832	10 266	22 860	93 243	16 062	918	6 149
JY	50 484	14 166	3 7 2 2	2 515	23 549	5 981	227	324
OY	59 725	11 790	11 838	7 665	15 794	10 617	1 013	1 008
JoY	18 542	5 429	1 559	778	7 806	2 626		344
KY	46 993	7 003	3 166	4 065	25 619	5 746	941	453
ΤY	56 447	16 853	3 465	3 123	27 646	3 542	1 040	778
TaY	56 351	11 020	3 970	10 670	20 275	3 337	6 545	534
ÅA	33 709	6 392	4 567	4 071	16 105	1 0 3 2	343	1 199
VY	5 822	621	367	958	3 236	580	8	52
LY	8 877	1 190	265	234	4 800	2 115		273
TKK	102 772	18 957	27 180	24 651	22 279	7 718	942	1 045
TTY	44 028	6 678	13 193	11 376	8 569	3 838	374	
LTY	22 540	1 896	4 503	8 003	5 872	2 056	163	47
HKKK	13 856	1 330	2 380	1 872	6 851	1 311	38	74
SHH	5 933	293	652	2 176	2 465	8	303	36
TuKKK	7 450	1 217	970	1 867	2 566	739	26	65
SibA	2 636	261			2 153	222		
TeaK	674	214	27	136	190			107
TaiK	7 134	357	1 109	1 336	2 856	1 165	6	305
KuvA	172	67		4	56	45		

International mobility

Of all first-degree students in Finland, 4,519 spent a period longer than 3 months studying abroad in 2008, the average duration of studies abroad being 5.6 months. The highest numbers of students on exchange came from the University of Helsinki, the University of Jyväskylä and the University of Tampere. The number of international exchange students in Finland was 5,280 and they stayed for 6 months on average. The most popular host universities were the University of Helsinki, the University of Oulu and the University of Tampere. Most international mobility took place in the fields of economics, the humanities and engineering.

The number of teacher and researcher exchanges from Finland to other countries lasting more than one month was 647 in 2008, while the number of exchange visits shorter than one month was 554. The number of incoming visits longer than one month was 999 and shorter than one month 554. By field of study, the greatest number of over one-month-long teacher and researcher visits, both from and to Finland, were paid in the field of engineering and the greatest number of under one-month-long visits in the field of the natural sciences.

		student mobi lor's and Master's			Y31 Internationa Over 3 months, Bachele				udy 2008
	Finnish visitors abroad	Duration of visits, average in months	Foreign visitors in Finland	Duration of visits, average in months		Finnish visitors abroad	Duration of visits, average in months	Foreign visitors in Finland	Duration of visits, average in months
Total	4 519	5,6	5 280	6,0	Total	4 519	5,6	5 280	6,0
HY	809	5,9	938	6,0	Theology	33	6,3	11	6,6
JY	479	5,2	414	5,2	Humanities	933	6,1	673	6,4
OY	295	5,3	502	5,8	Art and Design	101	5,8	172	6,0
JoY	207	5,6	257	7,7	Music	55	7,6	50	6,9
KY	122	4,4	154	5,5	Theatre and Dance	16 221	5,8	9	4,4
ΤY	357	5,9	306	6,3	Education Sport Sciences	40	5,1 5,0	298 45	5,2 5,6
TaY	362	6,0	449	7,3	Social Sciences	620	5,4	698	5,0 6,6
ÅA	167	6,1	229	6,1	Psychology	48	5,5	56	5,8
VY	184	4,9	179	5,3	Health Sciences	29	4,4	40	5,3
LY	152	5,9	193	5,6	Law	240	5,5	235	6,3
TKK	302	5,9	374	6,8	Economics	975	4,9	1 031	5,3
TTY	215	6,5	446	5,9	Natural Sciences	269	6,0	408	6,3
LTY	175	5,6	159	5,4	Agriculture				
НККК	271	4,4	236	4,7	and Forestry	104	5,5	200	6,7
SHH	110	4,6	110	4,8	Engineering	700	6,0	1 103	6,3
TuKKK	155	5,5	122	6,1	Medicine	65	5,5	137	5,9
SibA	54	7,6	50	6,9	Dentistry	12	6,2	33 20	4,6
TeaK	16	5,8	9	4,4	Veterinary Medicine Pharmacy	4 30	7,8 4,0	20 45	3,4
TaiK	76	5,4	138	6,0	Fine Arts	50 24	4,0 6,4	45 15	5,0 5,9
KuvA	11	6,0	15	5,9	Unspecified	0	0,1	1	3,0

Y32 Tea	acher and	researcher v	visits by univ	ersity 2008
	Over of	NE MONTH	Less than (ONE MONTH
	Finnish	Foreign	Finnish	Foreign
	visitors	visitors in	visitors	visitors in
	abroad	Finland	abroad	Finland
Total	647	999	554	632
HY	123	140	97	70
JY	50	67	74	75
OY	72	90	77	67
JoY	13	10	26	16
KY	21	26	10	3
TY	71	135	88	111
TaY	36	34	24	38
ÅA	48	71	38	31
VY	6	11	7	16
LY	2	4	14	5
TKK	104	167	43	66
TTY	52	172	15	24
LTY	10	10	13	5
HKKK	14	39	5	68
SHH	7	6	4	8
TuKKK	10	2	8	4
SibA	1		1	
TeaK		1	7	15
TaiK	8	12	3	2
KuvA		1	1	7

Y33 Teacher and researcher visits by field of study 2008

	Over of	NE MONTH	Less than c	NE MONTH
	Finnish	Foreign	Finnish	Foreign
	visitors	visitors in	visitors	visitors in
	abroad	Finland	abroad	Finland
Total	647	999	554	632
Theology	14	1	5	
Humanities	91	51	92	60
Art and Design	8	12	4	2
Music		1		1
Theatre and Dance	1	1	7	15
Education	10	14	19	6
Sport Sciences	3	0	3	1
Social Sciences	58	30	51	35
Psychology	4	7	2	6
Health Sciences	2	9	8	7
Law	3		4	1
Economics	55	61	27	104
Natural Sciences	135	199	160	166
Agriculture				
and Forestry	8	24	7	6
Engineering	199	441	91	116
Medicine	18	34	15	22
Dentistry	3	10	7	7
Veterinary Medicine	1	3	2	
Pharmacy	4	6	2	1
Fine Arts		1	1	7
Unspecified	30	94	47	81

Publications

A total of 25,203 publications were published in Finnish universities in 2008, of which 6,274 were in Finland and 18,929 abroad. The most publications were produced in the University of Helsinki (6,246), the University of Turku (2,867) and the Helsinki University of Technology (2,605). Publication activities were busiest in the fields of engineering (5,780) medicine (4,354) and the natural sciences (4,257).

Teacher training schools

Teacher training schools operate under the faculties of education of universities and provide pre-primary, basic and general upper secondary education. According to the Universities Act "Attached to a university which provides teacher education shall be a sufficient number of training schools to meet the needs of teaching practice and the development of teacher education; the training schools may provide basic and preschool education and upper secondary education". The management and supervision of teacher training schools is the responsibility of the university. The pupils of the training schools are not, however, students of the university. Teacher training schools provide the same knowledge and skills based on the national curriculum as a corresponding municipal comprehensive school or upper secondary school.

In 2008, there were 13 training schools in Finland, operating under eight universities. The number of pupils in these schools was 7,833 and that of staff 853. Their share of budget funding was approximately €76 million. A total of 38,275 ECTS credits used towards teacher training were completed in the schools.

	Y36 Teac	her trai	ning scho	ols 2008			
	Students	Staff	Budget funding €1,000	Facilities (property m ²)	Overall lesson hours	Weekly lessons per year	Completed credits, total
Total	7 833	853	76 138	129 716	15 286	3 303	38 273
HY	1 440	173	1 3957	21 418	2 933	1 630	6 673
JY	934	99	9 372	15 855	1 956	327	5 647
OY	1 074	113	10 644	16 963	2 223	332	6 337
JoY	1 263	124	12 244	19 959	2 355	275	5 624
ΤY	1 061	127	10 843	18 142	2 0 2 7	340	6 896
TaY	893	94	8 054	16 474	1 575	177	3 925
ÅA	814	91	7 897	13 779	1 557	131	2 100
LY	354	32	3 1 2 7	7 126	660	91	1 071

	Y34	Scientific pu	ıblicati	ons by u	niversity	y 2008				
		Published	in Finlai	ND			Published A	ABROAD		
	Articles	Articles in	Mono-	Univ.	Total	Articles	Articles in	Mono-	Total	All
	(ref.)	collections and	graphs	publication	n	(ref.)	collections and	graphs		publications
		conf. publ.		series			conf. publ.			total
Total	1 808	3 687	537	242	6 274	12 504	6 184	241	18 929	25 203
HY	396	1 146	148		1 690	3 717	930	89	4 7 3 6	6 426
JY	318	167	55	21	561	1 195	143	16	1 354	1 915
OY	180	258	35	21	494	1 180	607	2	1 789	2 283
JoY	68	248	34	8	358	318	226	16	560	918
KY	112	103	38		253	803	122	3	928	1 181
ΤY	267	347	45		659	1 786	414	8	2 208	2 867
TaY	190	338	52	5	585	753	262	21	1 0 3 6	1 621
ÅA	62	196	31	21	310	606	474	27	1 107	1 417
VY	30	91	14	30	165	101	154	2	257	422
LY	17	133	8	29	187	45	43	2	90	277
TKK	106	290	11		407	1 0 3 0	1 159	9	2 198	2 605
TTY	18	132	22		172	459	936	9	1 404	1 576
LTY	2	37	10	21	70	239	386	5	630	700
HKKK	14	57	13	35	119	123	94	16	233	352
SHH	7	26	10	14	57	65	82	10	157	214
TuKKK	9	77	1		87	61	115	2	178	265
SibA	3	6	5	2	16	9	4	1	14	30
TeaK	1	3	1		5	4	2		6	11
TaiK	8	26	4	12	50	9	27	2	38	88
KuvA		6		23	29	1	4	1	6	35

Y35 Scientific publications by field of study 2008

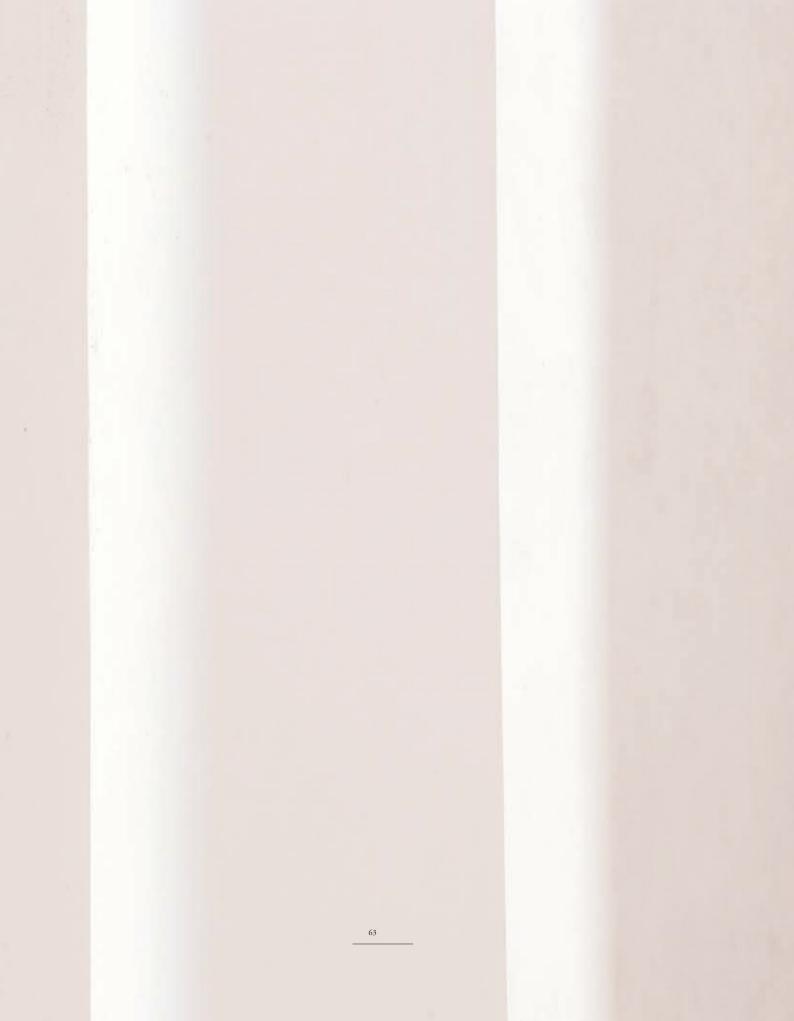
		Publish	ied in Fi	NLAND			Published a	BROAD		
	Articles	Articles in	Mono-	Univ.	Total	Articles	Articles in	Mono-	Total	All
	(ref.)	collections and	graphs	publication	I	(ref.)	collections and	graphs		publications
		conf. publ.		series			conf. publ.			total
Total	1 808	3 687	537	242	6 274	12 504	6 184	241	18 929	25 203
Theology	17	102	16	2	137	24	65	10	99	236
Humanities	366	791	89	27	1 273	378	494	28	900	2 173
Art and Design	8	35	4	13	60	9	31	2	42	102
Music	3	6	5	2	16	9	4	1	14	30
Theatre and Dance	e 1	3	1		5	4	2	0	6	11
Education	102	330	21	11	464	229	152	13	394	858
Sport Sciences	11	7	5	2	25	57	8		65	90
Social Sciences	238	537	153	28	956	446	356	69	871	1 827
Psychology	35	47	8	1	91	265	25	3	293	384
Health Sciences	104	73	15	3	195	363	14	1	378	573
Law	45	112	24	10	191	35	50	3	88	279
Economics	56	246	47	88	437	648	629	43	1 320	1 757
Natural Sciences	84	258	47	8	397	2 927	906	27	3 860	4 257
Agriculture										
and Forestry	47	117	10		174	292	167	6	465	639
Engineering	126	492	51	18	687	2 082	2 986	25	5 093	5 780
Medicine	451	356	8		815	3 449	90		3 539	4 354
Dentistry	16	20	1		37	224	13	1	238	275
Veterinary Medicir	ne	7			7	125	20		145	152
Pharmacy	15	6	3		24	196	11		207	231
Fine Arts		6		23	29	1	4	1	6	35
Unspecified	83	136	29	6	254	741	157	8	906	1 160

Polytechnics

A1 Polytechnics 2002–2008

A2 Polytechnic students and staff 2008

- A3 Polytechnic students and teachers by field of study 2008
- A4 Polytechnics: applicants, entrants and students 1998–2008
- A5 Polytechnics: applicants, entrants and students by field of study 2008
- A6 Applicants, entrants and students by polytechnic 2008
- A7 Polytechnic students by field of study 2008
- A8 Number of students (youth education) by polytechnic 2008
- A9 Number of polytechnic students (youth education) by field of study 2008
- A10 Foreign students in polytechnic degree education by polytechnic and by continent 2008
- All Foreign students in polytechnic degree education by field of study and by continent 2008
- A12 Number of degrees by polytechnic 2008
- A13 Completed polytechnic degrees by field of study 2008
- A14 Completed polytechnic degrees by field of study 1998–2008
- A15 Average completion times for polytechnic degrees 2000–2008 by field of study (in years)
- A16 Main occupation of polytechnic degree holders who graduated in 2003–2007 by field of study at the end of 2007
- A17 Full-time polytechnic teachers 2000–2008
- A18 Teachers by polytechnic 2008
- A19 Polytechnic teachers by field of study 2008
- A20 Cost of an ECTS credit completed in degree education
- A21 Total costs, funding and net expenditure 2007
- A22 International student and trainee exchange (for more than 3 months) by polytechnic 2008
- A23 International student and trainee exchange (over 3 months) by field of study 2008
- A24 International teacher and expert exchange by field of study 2008
- A25 Research and development activities in polytechnics: Research expenditure, research person-years and proportion of external funding by polytechnic in 2002–2007



Polytechnics

A1 Polytechnics 2002–2008											
	2002	2003	2004	2005	2006	2007	2008				
Applicants, degree education -											
Total	101 446	109 688	110 403	114 403	117 081	99 205	112 001				
Youth education (primary)	86 659	92 504	93 898	95 883	99 747	82 923	94 04				
Adult education	14 368	16 831	16 203	16 886	14 857	14 394	14 83				
Polytechnic master's degree	419	353	302	1 634	2 477	1 888	3 12				
ENTRANTS, DEGREE EDUCATION -											
Total	31 575	33 151	32 928	33 888	33 745	33 891	32 59				
Youth education	25 938	25 806	26 411	26 316	26 166	25 910	26 33				
Adult education	5 479	7036	6 281	6 943	6 204	6 214	6 25				
Polytechnic master's degree	158	309	236	629	1 375	1 767	1 99				
STUDENTS, DEGREE EDUCATION -											
Total	126 515	129 666	131 521	132 298	132 063	132 795	132 01				
Youth education	105 556	107 603	109 489	109 858	109 362	109 206	107 85				
Adult education	20 801	21 615	21 420	21 387	20 564	20 158	19 62				
Polytechnic master's degree	158	448	612	1 053	2 1 3 7	3 431	4 53				
Dropouts ———	10 634	12 147	12 354	12 798	13 130	13 551	13 07				
Completed degrees ———	20 478	20 505	20 729	21 325	20 917	20 926	21 77				
STUDENTS, OTHER EDUCATION -											
Specialisation studies	6038	7702	8072	8 037	6 981	6 185	5 23				
Teacher training	2741	3051	3293	3 581	3 983	3 834	3 81				
Open polytechnic, participants	7588	9487	10 703	10 210	12 359	11 438	12 83				
Teachers —											
Full-time teachers (number)	5 773,0	5 921,3	5 878,8	5 956,2	5 893,7	5 870,1	5 896,				
Part-time teachers (person-years)	197,5	167,6	151,3	154,9	184,9	153,7	159,				
Lecturers (person-years) —	163,6	170,8	158,3	166,8	188,4	191,1	151,				
Outsourced teaching											
(person-years)	165,6	150,7	138,5	133,4	107,5	99,6	76,				
Other staff (number) ———	4 320,0	4 595,7	4 610,4	4 789,6	4 755,6	4 806,6	4 484,				
OUTSOURCED SERVICES											
(PERSON-YEARS)	384,2	435,4	448,5	382,4	369,3	339,6	334,				

	A2 Polytee	chnic studer	nts and sta	ff 2008				
	Students	ENTS* Completed degrees	Full-time teachers	TEACHIN Part-time teachers		ed Lecturers 3	Othe Own	R STAFF Out- sourced services
	Number	Number	Number	Person-year	sPerson-yea	rsPerson-years	Number	Person-years
Total	132 015	21 770	5 896,0	159,7	76,3	151,8	4 484,6	334,7
Arcada	2 255	318	93,0	4,6	3,8	60,0		
Diaconia	3 121	664	181,0	9,6	90,0	0,6		
EVTEK**		608						
HAAGA-HELIA	9 655	1 474	370,8	5,2	3,3	5,6	208,0	
HAMK**		1 008						
HUMAK	1 332	240	91,0	1,6	1,1	59,0	18,9	
Häme	6 241	929	286,6	5,3	4,7	2,4	380,0	27,9
Jyväskylä	6 565	1 105	263,3	6,6	2,4	7,0	258,5	31,2
Kajaani	2 009	332	99,2	0,1	1,5	3,6	80,8	
Kemi-Tornio	2 783	411	126,1	1,4	2,9	116,0		
Central Ostrobothnia	3 363	494	139,8	8,3	3,4	2,3	150,4	8,0
Kymenlaakso	4 282	704	190,5	2,9	0,8	4,1	181,7	10,0
Lahti	4 883	838	224,7	14,0	0,6	6,6	132,1	52,7
Laurea	7 571	1 243	278,7	1,7	1,7	9,9	168,7	30,5
Metropolia	13 598	573	613,1	33,1	2,4	8,8	358,5	72,5
Mikkeli	4 472	725	175,7	0,4	7,8	194,0	0,7	
Oulu	7 525	1 179	378,2	10,3	1,9	8,8	293,4	
PIRAMK	4 024	795	178,0	7,9	9,8	2,1	124,4	2,9
North Karelia	3 843	614	207,5	2,4	3,2	9,2	138,0	1,9
Rovaniemi	3 212	519	143,0	1,5	0,4	3,0	99,0	
Saimaa	2 825	513	130,5	3,8	9,9	81,0	21,8	
Satakunta	5 598	944	278,0	13,3	1,2	4,5	185,0	
Savonia	6 478	1 165	283,2	6,2	9,9	13,0	257,8	3,6
Seinäjoki	4 718	755	204,8	3,7	0,2	8,1	197,8	0,5
Swedish**		194						
TAMK	5 472	844	227,1	17,1	1,0	2,1	200,0	
Turku	9 213	1 834	414,4	3,5	16,4	13,6	264,0	43,8
VAMK	3 503	474	150,6	2	1,1	1,9	105,9	
Novia	3 474	98	167,2	7,8	5,5	0,3	100,6	7,2
Sydväst**		176						
* Polytechnic degree education	on **See data an	d concepts						

A3 Polytech	nic stud	ents and tea	chers by	field of s	tudy 200)8	
		DENTS [*] Completed degrees		TEACHIN Part-time (teachers	Outsourced	Outsourced Lecturers	
	Number	Number	Number	Person-years	Person-years	Person-years	
Total	132 015	21 770	5 896,0	159,7	73,3	151,8	
Humanities and Education	1 405	267	214,1	6,2	2,3	2,8	
Culture	11 859	1 989	726,6	52,0	16,5	41,3	
Social Sciences, Business							
and Administration	27 088	4 4 3 0	1 002,3	27,1	11,6		
Natural Sciences	6 4 1 6	869	232,4	1,9	0,7	1,4	
Technology, Communication							
and Transport	38 860	5 491	1 484,8	38,7	8,1	29,4	
Natural Resources and							
the Environment	4 331	629	233,5	3,5	5,2	2,9	
Social Services, Health and Sports	33 239	6 540	1 702,1	24,4	26,2	50,3	
Tourism, Catering					- / -	/-	
and Domestic Services	8 817	1 555	300,2	5,8	5,7	5,5	
* Polytechnic degree education							

Students

In 2008, there were 94,043 primary applicants for admission to polytechnic youth education. The number of applicants to adult education was 14,836 and to polytechnic Master's degree education 3,122. All figures show a moderate increase, but proportionally, the increase was greatest in the number of applicants to Master's degree education, to which there were 1,888 applicants in 2007. In 2008, the number of new students was 34,583 including all levels of education. The total number of polytechnic students in 2008 was 132,015.

The largest numbers of applicants, all levels of education included, applied to the field of social services, health and sport (35,973), social sciences, business and administration (25,628) and technology, communication and transport (23,826). The largest number of entrants was in the field of social services, health and sports (9,921) and the largest total number of students was in the field of technology, communication and transport (38,860).

The HAAGA-HELIA Polytechnic attracted the most applicants in all other levels of education except for the Master's degree studies, in which the Metropolia Polytechnic was the most popular choice. The number of entrants, as well as the total number of students, was the highest in the Metropolia Polytechnic.

	Total	Humanities and Education	Culture	Social Sciences, Business and Administration	Natural Sciences	Technology, Communication and Transport		Sports	
Applicants Youth*	94 043	700	9 704	21 831	5 046	20 359	1 529	28 637	6 237
Adults*	14 836	139	1 062	3008	458	2 788	408	6 197	776
Polytechnic	14 850	139	1 002	5008	4)0	2/00	408	0 197	//0
master's degree	3122	37	100	789	125	679	51	1 1 3 9	202
Total	112 001	876	10 866	25 628	5 629	23 826	1 988	35 973	7 215
Women %	52,3	83,4	67,8	43,5	18,5	14,9	54,5	80,9	63,5
ENTRANT	,5	0,4	07,0	45,5	10,9	14,7	,,,		
Youth	26 339	320	2 268	5 295	1 273	7 745	792	6 943	1 703
Adults	6 251	49	424	1 394	264	1 278	231	2 205	406
Polytechnic				- 07 -		/ -	-0-		
master's degree	1 993	20	79	451	45	469	39	773	117
Total	34 583	389	2 771	7 140	1 582	9 492	1 062	9 921	2 226
Women %	56,7	82,5	68,9	62,1	24,6	16,6	51,2	87,5	79,3
Students									
Youth	107 857	1 198	10 456	21 333	5 264	32 984	3 493	26 183	6 946
Adults	19 622	167	1 301	4 559	996	4 745	687	5 584	1 583
Polytechnic									
master's degree	4 536	40	102	1 196	156	1 131	151	1 472	288
Total	132 015	1 405	11 859	27 088	6 4 1 6	38 860	4 331	33 239	8 817
Women %	54,9	79,5	67,1	63,0	26,6	15,6	50,3	87,7	81,4
*Primary									

A5 Polytechnics: applicants, entrants and students by field of study 2008

	A4 Pol	ytechnics:	applica	nts, entra	nts and st	tudents	1998–2	2008				
	Youth	PPLICANTS (1 Adult 6 education*	Polytechn		ENTRANTS Youth Adult Polytechnic Total education education master's degree				STUDENTS Youth Adult Polytechnic Total education education master's degree			
1998	90 098	13 465		103 563	26 077	6 6 4 6		32 723	65 065	13 022		7 8 08 7
1999	92 332	13 605		105 937	25 773	7 314		33 087	79 278	17 230		96 508
2000	89 698	14 520		104 218	25 772	7 256		33 028	93 617	20 530		114 147
2001	86 680	15 465		102 145	25 662	6 175		31 837	100 362	21 099		121 461
2002	86 659	14 368	419	101 446	25 938	5 479	158	31 575	105 556	20 801	158	126 515
2003	92 504	16 831	353	109 688	25 806	7 036	309	33 151	107 603	21 615	448	129 666
2004	93 898	16 203	302	110 403	26 411	6 281	236	32 928	109 489	21 420	612	131 521
2005	95 883	16 886	1 634	114 403	26 316	6 943	629	33 888	109 858	21 387	1 053	132 298
2006	99 747	14 857	2 477	117 081	26 166	6 204	1 375	33 745	109 362	20 564	2 1 3 7	132 063
2007	82 923	14 394	1 888	99 205	25 910	6 214	1 767	33 891	109 206	20 158	3 4 3 1	132 795
2008	94 043	14 835	3 122	112 001	26 339	6 251	1 993	34 583	107 857	19 622	4 536	132 015

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	Аб Арр	licants, ei	ntrants a	nd studen	ts by pol	ytechnic	2008					
		Applica	ANTS			Entr	ANTS			Stud	ENTS	
	Youth education*	Adult education*	Polytechni master's degree	c Total	Youth education	Adult education	Polytechni master's degree	c Total	Youth education	Adult education	Polytechni master's degree	c Total
	Number	Number	Number	Number	Number	Number	Number	Number	Number	Number	Number	Number
Total	94 043	14 836	3 1 2 2	112 001	26 339	6 251	1 993	34 583	107 857	19 622	4 536	132 015
Arcada	2 027		21	2 048	514		15	529	2 202	27	26	2 255
Diaconia	1 817	745	93	2 655	567	271	40	878	2 305	729	87	3 121
EVTEK**		131		131								
HAAGA-HELIA	10 859	1 279	246	12 384	1 739	590	106	2 435	7 051	2 263	341	9 655
HAMK**	1 575	744		2 319								
HUMAK	713	144	37	894	297	50	20	367	1 141	151	40	1 332
Häme	3 286	1 453	166	4 905	1 065	516	103	1 684	4 637	1 333	271	6 241
Jyväskylä	6 283	471	190	6 944	1 274	202	126	1 602	5 393	794	378	6 565
Kajaani	1 325	172	55	1 552	447	52	31	530	1 673	270	66	2 009
Kemi-Tornio	2 253	434	99	2 786	550	187	60	797	2 066	601	116	2 783
Central Ostrobothnia	2 695	207	86	2 988	699	87	58	844	2 832	399	132	3 363
Kymenlaakso	2 572	416	82	3 070	763	211	67	1 041	3 446	713	123	4 282
Lahti	3 712	555	132	4 399	894	269	81	1 244	3 803	887	193	4 883
Laurea	3 775	987	237	4 999	1 585	334	115	2 0 3 4	6 343	974	254	7 571
Metropolia	10 244	1 109	271	11 624	2 971	668	191	3 830	11 259	1 935	404	13 598
Mikkeli	1 426	740	114	2 280	832	330	88	1 250	3 292	1 015	165	4 472
Oulu	6 254	615	137	7 006	1 557	303	112	1 972	6 317	978	230	7 525
PIRAMK	3 886	488	132	4 506	817	144	79	1 040	3 421	491	112	4 0 2 4
North Karelia	1 706	451	96	2 253	749	243	58	1 050	2 960	733	150	3 843
Rovaniemi	2 080	484	59	2 623	573	282	39	894	2 4 4 9	684	79	3 212
Saimaa	1 721	158	72	1 951	576	107	56	739	2 318	406	101	2 825
Satakunta	1 881	423	128	2 4 3 2	1 058	215	84	1 357	4 811	591	196	5 598
Savonia	4 1 2 3	473	87	4 683	1 374	222	73	1 669	5 537	731	210	6 478
Seinäjoki	1 740	488	120	2 348	975	238	83	1 296	3 821	683	214	4 718
TAMK	4 019	414	158	4 591	1 1 3 3	153	91	1 377	4 770	541	161	5 472
Turku	8 129	899	221	9 249	1 948	359	146	2 453	8 063	866	284	9 213
VAMK	2 765	226	38	3 0 2 9	690	129	34	853	2 873	506	124	3 503
Novia	1 177	130	45	1 352	692	89	37	818	3 074	321	79	3 474
* Primary ** See data and	concepts											

Degree Education

In 2008, the number of students attending degree education in polytechnics was 132,015. The number of students in youth education was 107,857, in adult education 19,622 and in polytechnic Master's degree education 4,536. In youth education, the largest field of study was engineering (32,984 students), while in adult education and polytechnic Master's degree education the largest field is social services, health and sports (5,584 and 1,472 students, respectively). The share of women in youth education was 53.1, in adult education 62.7 and in polytechnic Master's degree education 54.9 per cent.

The largest fields when all levels of education are considered were technology, communication and transport (32,984 students), social services, health and sports (26,183 students) and social sciences, business and administration (21,333 students). In 2008, 77.5 per cent of students in youth education completed their degree within the normative duration of study, while 8 per cent completed theirs within the normative duration + 1 year and 3 per cent took an extension. A total of 11.8 per cent of students had registered as non-attending.

The number of foreign students in polytechnic degree education in 2008 was 6,294, which is 4.7 per cent of all students. Clearly the most popular field among foreign students was technology, communication and transport (2,206), followed by social sciences, business and administration (2,134). The majority of foreign students were from Asia (2,225), Europe (1,985) and Africa (1,843).

	A7 P	olytechnic	student	s by field	of stud	v 2008					
		•	EGREE ED			<i>,</i>					
	Youth	YOUTH EDUCATION ADULT EDUCATION POLYTECHNIC									
					MASTER'	S DEGREE	Т	OTAL			
	Number	Women %	Number V	Women %	Number	Women %	Number	Women %			
Total	107 857	53,1	19 622	62,7	4 536	62,9	132 015	54,9			
Humanities and Education	1 198	80,6	167	71,9	40	80,0	1 405	79,5			
Culture	10 456	66,2	1 301	74,6	102	63,7	11 859	67,1			
Social Sciences, Business											
and Administration	21 333	60,1	4 559	74,2	1 196	72,5	27 088	63,1			
Natural Sciences	5 264	22,7	996	44,0	156	46,2	6 4 1 6	26,6			
Technology, Communication											
and Transport	32 984	15,5	4 745	16,9	1 1 3 1	14,6	38 860	15,6			
Natural Resources and											
the Environment	3 493	50,2	687	51,5	151	46,4	4 3 3 1	50,3			
Social Services, Health and Sport	ts 26 183	87,4	5 584	87,8	1 472	91,0	33 239	87,7			
Tourism, Catering and											
Domestic Services	6 946	80,7	1 583	84,1	288	83,3	8 817	81,4			

A8	Number	of stud	ents (you	th educ	ation) by	7 polyt	echnic 20	08	
		MATIVE Ation	Norma duration		Time ext	Time extension		red as ending	Total
	Number	%	Number	%	Number	%	Number	%	Number
Average	83 623	77,5	8 197	7,6	3 353	3,1	12 684	11,8	107 857
Arcada	1 671	75,9	194	8,8	67	3,0	270	12,3	2 202
Diaconia	1 898	82,3	100	4,3	36	1,6	271	11,8	2 305
HAAGA-HELIA	5 313	75,4	684	9,7	273	3,9	781	11,1	7 051
HUMAK	901	79,0	76	6,7	35	3,1	129	11,3	1 141
Häme	3 519	75,9	417	9,0	164	3,5	537	11,6	4 637
Jyväskylä	4 1 3 7	76,7	425	7,9	131	2,4	700	13,0	5 393
Kajaani	1 372	82,0	82	4,9	13	0,8	206	12,3	1 673
Kemi-Tornio	1 672	80,9	128	6,2	76	3,7	190	9,2	2 066
Central									
Ostrobothnia	2 1 2 8	75,1	209	7,4	91	3,2	404	14,3	2 832
Kymenlaakso	2 589	75,1	291	8,4	146	4,2	420	12,2	3 446
Lahti	2 964	77,9	344	9,0	103	2,7	392	10,3	3 803
Laurea	5 031	79,3	464	7,3	270	4,3	578	9,1	6 343
Metropolia	8 717	77,4	811	7,2	400	3,6	1 331	11,8	11 259
Mikkeli	2 595	78,8	217	6,6	97	2,9	383	11,6	3 292
Oulu	4 860	76,9	527	8,3	187	3,0	743	11,8	6 317
PIRAMK	2 744	80,2	227	6,6	67	2,0	383	11,2	3 421
North Karelia	2 324	78,5	255	8,6	39	1,3	342	11,6	2 960
Rovaniemi	1 958	80,0	168	6,9	95	3,9	228	9,3	2 449
Satakunta	1 945	83,9	140	6,0	15	0,6	218	9,4	2 318
Saimaa	3 629	75,4	413	8,6	199	4,1	570	11,8	4 811
Savonia	4 235	76,5	449	8,1	142	2,6	711	12,8	5 537
Seinäjoki	3 073	80,4	203	5,3	67	1,8	478	12,5	3 821
TAMK	3 616	75,8	370	7,8	138	2,9	646	13,5	4 770
Turku	6 246	77,5	579	7,2	289	3,6	949	11,8	8 063
VAMK	2 1 3 6	74,3	237	8,2	107	3,7	393	13,7	2 873
Novia	2 350	76,4	187	6,1	106	3,4	431	14,0	3 074

A9 Number of polytechnic students (youth education) by field of study 2008

	Norm durat		Norma duration		Time exti	ENSION	Non-atte	ENDING	Total
	Number	%	Number	%	Number	%	Number	%	Number
Total	83 623	77,5	8 197	7,6	3 353	3,1	12 684	11,8	107 857
Humanities and Education	922	77,0	86	7,2	40	3,3	150	12,5	1 198
Culture	8 220	78,6	905	8,7	305	2,9	1 026	9,8	10 456
Social Sciences, Business									
and Administration	16 540	77,5	1 819	8,5	693	3,2	2 281	10,7	21 333
Natural Sciences	3 831	72,8	510	9,7	278	5,3	645	12,3	5 264
Technology, Communication									
and Transport	24 144	73,2	2 922	8,9	1 381	4,2	4 537	13,8	32 984
Natural Resources and									
the Environment	2 571	73,6	319	9,1	128	3,7	475	13,6	3 493
Social Services, Health									
and Sports	21 936	83,8	1 088	4,2	350	1,3	2 809	10,7	26 183
Tourism, Catering and									
Domestic Services	5 459	78,6	548	7,9	178	2,6	761	11,0	6 946

by continent 2000	Source: Stat	istics rinland						
	Asia	Africa	Europe	Central and				Total
				South America		America	unknown	
				the Caribbean		,		
Arcada	90	105	70	2	2	4		273
Diaconia	17	37	45	4	1	1		105
HAAGA-HELIA	246	167	386	29	7	30	5	870
HUMAK			4			0		4
Häme	163	104	39	8		2		316
Jyväskylä	51	55	112	3	1	4		226
Kajaani	42	19	34			2		97
Kemi-Tornio	109	125	74	1				309
Central Ostrobothnia	201	153	57	1	1	1		414
Kymenlaakso	53	10	97	3		1		164
Lahti	123	18	63	4		1		209
Laurea	79	137	84	7	4	3		314
Metropolia	167	223	227	13	4	12	3	649
Mikkeli	84	26	55	2				167
Oulu	71	79	68	2	3	8		231
North Karelia	11	7	52	1		2		73
Rovaniemi	58	38	66	4	2	5		173
Satakunta	69	40	64			1	1	175
Saimaa	24	6	24					54
Savonia	167	94	50	1	1	5		318
Seinäjoki	37	24	27	1				89
ТАМК	68	73	88	8	3	9		249
Turku	123	108	90	3	1	3		328
VAMK	151	180	50	7			1	389
Novia	21	15	59	2	1			98
Average	2 225	1 843	1 985	106	31	94	10	6 294

A10 Foreign students in polytechnic degree education by polytechnic and by continent 2008 $_{\rm Source: Statistics Finland}$

A11 Foreign students in polytechnic degree education by field of study and by continent 2008 Source: Statistics Finland

	Asia	Africa	Europe	Central and South America, the Caribbean			North America	Total
Humanities and Education			1					1
Culture	19	7	192	5		1	5	229
Natural Sciences	180	161	90	7	3	3	8	452
Natural Resources and								
the Environment	6	7	15	1			1	30
Tourism, Catering								
and Domestic Services	153	102	192	13		2	8	470
Social Services, Health and Sports	108	326	297	12	2	3	24	772
Technology, Communication								
and Transport	883	833	442	25	3	6	14	2 206
Social Sciences, Business								
and Administration	876	407	756	43	2	16	34	2 1 3 4
Total	2 2 2 5	1 843	1 985	106	10	31	94	6 294

Degrees

The number of degrees awarded in polytechnics in 2008 was 21,770, the majority of which were in youth education (17,348), while 3,741 were awarded in adult education and 681 in polytechnic Master's degree education. Most of the degrees were awarded in the fields of social services, health and sports (6,540), technology, communication and transport (5,491) and social sciences, business and administration (4,430). Women comprised 63.6 per cent of all graduates, their share varying between 91.2 per cent in social services, health and sports and 18.1 per cent in technology, communication and transport.

The average duration of study was 4.2 years in youth education, 3.4 years in adult education and 2.1 years in polytechnic Master's degree education. There were no major variations between study times in different fields, the range being from 3.9 years in humanities and education and social services, health and sports to 4.5 years in culture, technology, communication and transport and natural resources and the environment. The longest average time for completing a degree was in the field of natural resources and the environment (4.0 years) and the shortest in humanities and education (2.6 years). The polytechnic Master's degrees were completed on average the fastest in culture (1.4 years) and the slowest in social sciences, business and administration (2.7 years).

Job placement

Of those having completed a polytechnic degree in 2003–2007, 86 per cent were employed at the end of 2007; 83.5 per cent of all graduates were employees and 2.5 entrepreneurs. The share of unemployed in the group was 4.5, while 4.1 per cent were studying and 1.8 had emigrated.

The unemployment rate was the highest for graduates from the field of culture (10.2%) and the lowest for those with degrees in social services, health and sports (3.4%). Entrepreneurship was the was commonest in the natural resources and the environment: 14.1 per cent of the 2003–2007 graduates in the field had chosen that path. The largest group of students at the end of 2007 was among graduates in the field of culture (7.6%).

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	A12 Cc	mpleted	degrees	by polyte	chnic 20	800			
	Т	TOTAL YOUTH EDUCATION ADULT EDUCATION							
	Number	Women %	Number Women %		Number	Women %	MASTER'S DEGREE Number Women %		
Total	21 770	63,6	17 348	61,6	3 741	72,0	681	67,4	
Arcada	318	69,5	310	69,0	7	85,7	1	100,0	
Diaconia	664	92,8	433	92,4	201	94,5	30	86,7	
EVTEK*	608	46,4	425	42,1	163	54,6	20	70,0	
HAAGA-HELIA	1 474	71,7	1 1 2 2	71,1	312	74,0	40	70,0	
HAMK*	1 008	58,5	733	53,8	215	72,1	60	68,3	
HUMAK	240	83,3	183	83,1	46	87,0	11	72,7	
Häme	929	59,9	659	60,5	212	62,7	58	41,4	
Jyväskylä	1 105	58,5	946	57,9	111	63,1	48	58,3	
Kajaani	332	58,4	271	56,1	52	75,0	9	33,3	
Kemi-Tornio	411	64,2	299	62,9	103	66,0	9	88,9	
Central Ostrobothnia	494	58,3	397	53,9	82	85,4	15	26,7	
Kymenlaakso	704	60,9	550	55,8	153	79,1	1	100,0	
Lahti	838	62,9	669	61,7	133	66,2	36	72,2	
Laurea	1 243	76,8	1 046	75,8	157	81,5	40	85,0	
Metropolia	573	70,9	480	70,2	71	71,8	22	81,8	
Mikkeli	725	64,3	508	59,8	203	75,9	14	57,1	
Oulu	1 179	57,4	996	55,6	166	65,7	17	82,4	
PIRAMK	795	86,8	634	85,3	133	91,0	28	100,0	
North Karelia	614	61,7	491	59,5	107	78,5	16	18,8	
Rovaniemi	519	56,1	364	51,6	136	66,2	19	68,4	
Saimaa	513	67,6	410	61,5	97	91,8	6	100,0	
Satakunta	944	57,9	747	54,8	157	71,3	40	65,0	
Savonia	1 165	61,9	986	61,9	154	61,7	25	64,0	
Seinäjoki	755	64,1	628	62,6	95	73,7	32	65,6	
Swedish*	194	45,4	184	43,5	10	80,0	0	0	
ТАМК	844	41,1	710	39,9	94	45,7	40	52,5	
Turku	1 834	62,9	1 507	61,0	289	69,9	38	86,8	
VAMK	474	50,4	417	50,4	53	47,2	4	100,0	
Novia	98	71,4	89	73,0	8	50,0	1	100,0	
Sydväst*	176	59,7	154	61,0	21	47,6	1	100,0	
* See data and concepts									

A13 Completed polytechnic degrees by field of study 2008

	To	DTAL	Youth e	DUCATION	Adult e	DUCATION	Polytechnic master's degree	
	Number	Women %	Number	Women %	Number	Women %	Number	Women %
Total	21 770	63,6	17 348	61,6	3 741	72,0	681	67,4
Humanities and Education	267	82,0	199	82,9	57	80,7	11	72,7
Culture	1 989	72,0	1 687	70,5	272	81,3	30	76,7
Social Sciences, Business								
and Administration	4 4 3 0	73,0	3 515	70,6	781	84,5	134	68,7
Natural Sciences	869	35,3	710	30,6	138	55,8	21	61,9
Technology, Communication								
and Transport	5 491	18,1	4 601	18,2	741	17,0	149	19,5
Natural Resources and the Environment	629	54,5	502	57,2	98	40,8	29	55,2
Social Services, Health and Sports	6 540	91,2	4 860	90,7	1 416	92,7	264	92,0
Tourism, Catering and Domestic Services	1 555	86,6	1 274	86,3	238	89,1	43	81,4

	Humanities	Culture	Social Sciences,	Natural	Technology,	Natural	Social Services	, Tourism,	
	and Education		Business and Administration		Communication and Transport	Resources and the	Health and Sports	Catering and Domestic	
2000						Environmen	t	Services	Total
2000		588	2 616	337	2 885	336	3 665	365	10 792
Adults	24	174	711	105	716	169	1 253	209	3 361
Women %	60,8	76,7	73,58	42,4	19,27	50,91	92	84,03	64,7
Total	24	762	3 327	442	3 601	505	4 918	574	14 153
2001		,						2, -	
Youth	79	750	3 342	516	3 761	392	4 523	733	14 096
Adults	42	232	871	171	904	146	1 271	225	3 862
Women %	62,3	75,1	73,3	45,9	20,7	48,9	91,7	85,3	64,5
Total	121	982	4 213	687	4 665	538	5 794	958	17 958
2002									
Youth	160	952	3 734	662	4 209	504	4 917	1 029	16 167
Adults	78	266	925	266	939	161	1 334	342	4 311
Women %	64,7	75,8	74,4	52,8	20,8	45,5	90,5	82,7	64,0
Total 2003	238	1 218	4 659	928	5 1 4 8	665	6 251	1371	20 478
Youth	176	1 188	3 675	761	4 336	500	4 279	1 134	16 049
Adults	108	305	1 074	287	1 016	201	1 114	351	4456
Women %	65,8	74,6	75,0	50,9	21,5	46,6	91,3	82,5	63,3
Total	284	1 493	4 749	1 048	5 352	701	5 393	1 485	20 505
2004									
Youth	187	1 436	3 550	786	4 530	520	4 290	1105	16 404
Adults	67	272	975	318	1 037	120	1 124	353	4 266
Polytechnic									
master's degree			14		6		39		59
Women %	63,7	73,6	76,7	52,8	22,1	47,2	90,2	83,3	62,6
Total 2005	254	1 708	4 539	1 104	5 573	640	5 453	1 458	20 729
Youth	189	1 501	3 697	838	4 592	554	4258	1059	16688
Adults	83	247	1 074	264	996	118	1300	373	4455
Polytechnic									
master's degree			50		59		73		182
Women %	60,3	76,2	76,2	48,5	22,2	45,9	91,8	83,1	62,9
Total 2006	272	1 748	4 821	1 102	5647	672	5631	1432	21325
Youth	212	1 575	3 483	807	4 515	528	4 4 50	1 118	16 688
Adults	71	275	1 039	197	870	135	1 181	311	4 079
Polytechnic									
master's degree			62		26		62		150
Women %	59,8	74,8	77,0	43,8	21,8	54,7	91,9	82,4	63,7
Total	283	1 850	4 584	1 004	5 411	663	5 693	1 429	20 917
2007	200	1 (14	2 27(720	6 / (1	40.4	4 702	1 114	16 (00
Youth Adults	209 53	1 614 293	3 376 851	729 144	4 461 869	494 126	4 702 1 258	1 114 271	16 699 3 865
Polytechnic	55	295	8)1	144	809	120	1 2 3 8	2/1	5 805
master's degree			85	7	104		160	6	362
Women %	59,2	75,2	75,0	40,8	22,1	54,4	91,6	84,1	63,6
Total	262	1 907	4 312	880	5 434	620	6 120	1 391	20 926
2008		- , • ,							
Youth	199	1 687	3 515	710	4 601	502	4 860	1 274	17 348
Adults	57	272	781	138	741	98	1416	238	3741
Polytechnic									
master's degree	11	30	134	21	149	29	264	43	681
Women %	62,1	74,0	73,5	36,5	21,0	53,2	91,4	86,3	63,6
Total	267	1 989	4 430	8 69	5 491	629	6 540	1 555	21 770

A14 Completed polytechnic degrees by field of study 2000–2008

	Humanities and Education	Culture	Social Sciences, Business and Administration		Technology, Communication and Transport		Sports	, Tourism, Catering and Domestic Services	Total on average
2000									
Youth education	4,1	3,9	3,9	4,2	4,2	3,6	3,9	4,0	
Adult education	1,8	2,5	3,3	3,3	3,1	2,5	2,5	2,8	2,7
2001									
Youth education	3,4	4,2	4,0	3,9	4,3	4,3	3,6	4,0	4,0
Adult education	1,8	2,5	3,3	2,9	3,1	3,2	2,5	2,9	2,8
2002									
Youth education	3,7	4,3	4,0	4,0	4,4	4,3	3,7	4,1	4,1
Adult education	2,2	2,3	3,4	3,4	3,4	3,0	2,5	3,2	2,9
2003									
Youth education	3,9	4,4	4,1	4,1	4,4	4,4	3,7	4,1	4,1
Adult education	2,4	2,5	3,5	3,4	3,4	3,2	2,7	3,3	3,1
2004	/ 1		(0	()	1.5		2.0		(2
Youth education	4,1	4,4	4,0	4,2	4,5	4,4	3,8	4,0	4,2
Adult education	2,6	2,6	3,4	3,5	3,6	3,3	2,7	3,2	3,1
Polytechnic			2.1		2.0		2.2		2.1
master's degree 2005			2,1		2,0		2,2		2,1
Youth education	4,1	4,5	4,1	4,2	4,5	4,4	3,8	4,1	4,2
Adult education	2,3	2,6	3,2	3,7	3,6	3,3	2,8	3,1	3,1
Polytechnic	2,5	2,0	5,2	5,7	5,0	5,5	2,0	5,1	5,1
master's degree			2,8		2,2		2,4		2,5
2006					2,2		2,1		2,9
Youth education	4,0	4,5	4,1	4,3	4,5	4,4	3,8	4,2	4,2
Adult education	2,3	2,8	3,3	3,9	3,7	3,5	2,9	3,5	3,2
Polytechnic									
master's degree			2,9		3,1		2,3		2,8
2007									
Youth education	3,9	4,5	4,1	4,3	4,5	4,4	3,9	4,2	4,2
Adult education	2,3	2,7	3,4	3,9	3,6	3,4	3,0	3,4	3,2
Polytechnic									
master's degree			2,7	1,7	2,2		2,3	1,8	2,2
2008									
Youth education	3,9	4,5	4,1	4,3	4,5	4,5	3,9	4,2	4,2
Adult education	2,6	2,9	3,7	4,0	3,7	3,8	2,9	3,7	3,4
Polytechnic	2.0	. /				2.0	2.2	2.2	<u>.</u>
master's degree	2,0	1,4	2,7	2,2	2,2	2,0	2,3	2,2	2,1

A15 Average completion times of polytechnic degrees by field of study 2000–2008 (in years)

A16 Main occupation of holders of polytechnic degrees graduated in 2003–2007 by field of study at the end of 2007

		Main occ	CUPATION A	T THE END OF	2007			
N. C		EMPLOY		TT 1 1		HER OCCUPAT		0.1
Year of graduation	Graduates	Employee	Entre- preneur	Unemployed	Student	Military/ non-military service	Ex- patriated	Other
Fields of study t	otal Number	%	%	%	%	%	%	%
2003–2007	102 239	83,5	2,5	4,5	4,1	0,1	1,8	3,5
2003	19 623	84,7	3,2	2,9	2,8	-	1,9	4,5
2004	20 166	84,5	3,0	3,2	3,0		2,1	4,2
2005	20 958	84,6	2,4	3,5	3,7		2,0	3,7
2006	20 747	85,0	2,3	4,4	3,3		1,7	3,3
2007	20 745	78,7	1,60	8,5	7,7		1,3	2,0
Humanities and	DEDUCATION -							
2003-2007	1 333	84,8	1,1	5,7	4,9		0,5	3,0
2003	273	87,9	2,2	1,1	3,7		0,7	4,4
2004	251	86,1	2,0	5,2	2,8			4,0
2005	266	85,7	0,4	3,4	6,8		1,1	2,7
2006	281	86,1	0,7	6,8	2,5		0,7	3,2
2007	262	78,2		12,2	8,8			0,8
Culture								
2003-2007	8 263	70,4	4,4	10,2	7,6	0,2	2,2	5,2
2003	1 358	71,6	5,7	7,0	6,9	0,1	2,9	6,1
2004	1 588	71,5	5,4	7,7	6,7	0,2	3,4	5,3
2005	1 668	71,8	4,1	8,8	7,9	0,1	1,8	5,7
2006	1 800	71,4	3,8	10,6	7,6	0,2	1,6	4,7
2007	1 849	66,3	3,4	15,6	8,4	0,4	1,5	4,5
Social Sciences	, Business and	Administi	ration —					
2003-2007	22 496	83,7	2,1	3,6	3,7	0,1	2,9	4,1
2003	4 546	85,0	2,7	2,6	2,4		2,9	4,4
2004	4 404	84,6	2,4	2,4	2,9		2,9	5,0
2005	4 710	84,5	2,0	2,5	3,7		3,0	4,5
2006	4 554	83,9	2,0	3,7	3,2	0,1	3,0	4,2
2007	4 282	80,4	1,4	6,8	6,4	0,2	2,6	2,2
NATURAL SCIENC								
2003-2007	5 052	85,0	1,7	5,8	3,7	0,1	1,2	2,4
2003	1 021	88,5	1,7	3,4	3,1		1,3	2,0
2004	1 080	85,4	2,4	5,3	2,6		1,6	2,8
2005	1 090	87,3	1,5	3,8	3,9		1,2	2,3
2006	997	84,5	2,2	5,7	3,5	0,1	1,1	2,9
2007	864	78,1	0,7	12,2	5,9	0,5	0,8	1,9
Technology, C								
2003-2007	26 932	86,7	2,2	4,0	3,5	0,2	1,7	5,4
2003	5 116	88,5	2,8	2,4	2,5		1,7	2,1
2004	5 462	88,0	2,4	2,5	3,2		2,1	1,9
2005	5 561	86,8	2,4	3,7	3,7		1,7	1,6
2006	5 383	87,3	2,0	3,9	3,2	0,2	1,7	1,8
2007	5 410	83,0	1,3	7,7	4,8	0,6	1,1	1,5
NATURAL RESOU				7 7	5 (0.1	0.7	2.2
2003–2007	3 197	68,5	14,1	7,7	5,6	0,1	0,7	3,3
2003	660	67,1	17,7	6,1	3,3		1,2	4,6
2004	595	69,1	16,6	6,4 7.0	4,7		0,5	2,7
2005	667	69,9	13,3	7,0	5,7		0,4	3,6
2006	660	69,2	12,7	8,5	5,9	0.2	0,6	3,0
2007	615	67,3	10,1	10,6	8,5	0,3	0,7	2,6
SOCIAL SERVICES 2003–2007	, Health and 3 27 854	Sports — 85,4	1,6	3,4	4,1		1,1	4,4
	27 834 5 201							4,4 6,9
2003		85,7 86.2	2,2	2,1	2,3		1,0	
2004	5 350 5 574	86,2 87.5	2,4	2,3	1,9 2 4		1,4 1.6	5,8 47
2005		87,5	1,5	2,3	2,4		1,6	4,7
2006	5 648 6 081	90,1 78,1	1,3	2,3	1,8	0.1	1,0	3,5
2007 Tourism Cater		78,1	0,8	7,3	11,4	0,1	0,6	1,6
Tourism, Catef 2003–2007	ang and Dom 7 112	83,3	CES 1,7	4,7	3,6		2,2	4,8
2003-2007 2003	1 448	83,3	2,3	4,7 3,2	5,6 2,9		2,2 2,3	4,8 6,1
2003	1 448	83,8	2,5 1,8	3,2 3,8	2,9		2,5 2,4	6,1 6,1
2004 2005	1 430	85,8 84,1	1,8	3,0 3,1	2,2 3,0		2,4 3,4	5,0
2005	1 422	84,1 84,0	1,5	5,1 5,4	3,0 3,4			5,0 4,3
2008	1 424	84,0 81,0	1,3	7,9	5,4 6,5		1,5 1,1	4,5 2,4
Source: Statistics Fi		01,0	1,2	7,7	0,7		1,1	∠,4

Staff

Teachers

In 2008, there were 5,896 full-time teachers in polytechnics, 946 (16%) of whom were principal lecturers, 3,619 (61.4%) senior lecturers and 1,331 (22.6%) lecturers. The share of women among principal lecturers was 44.5 per cent, senior lecturers 62.6 per cent and lecturers 55.9 per cent. The proportion of women among full-time teachers was the largest in social services, health and sports (87.8%), followed by tourism, catering and domestic services (78.8%). The proportion of women was the smallest in technology, communication and transport (23.7%) and natural sciences (36.6%).

The numbers of doctors among full-time teachers were 593 (10.1%), licentiates 635 (10.8%) and Master's degree holders 4,072 (69.1%). The visiting lecturers and guest speakers provided teaching corresponding to 311.5 person-years in 2008.

Other staff

In 2008, the number of non-teaching staff in polytechnics was 4,485 persons. In terms of function, the largest staff groups other than in teaching were in teaching administration with 937 persons (21%), general administration with 848 persons (18.9%) and other teaching support functions. In addition, the total amount of outsourced services was 334.7 person-years.

А	A17 Full-time polytechnic teachers 2000–2008											
	Principal Senior Lecturers Lecturers Lecturers											
Year	Number	Women %	Number	Women %	Number	Women %						
2000	898	37,5	3 0 2 2	64,6	1 348	55,1						
2001	920	38,2	3 229	63,5	1 448	53,5						
2002	943	38,5	3 321	63,0	1 509	52,9						
2003	949	38,4	3 425	63,1	1 546	52,7						
2004	955	40,2	3431	62,0	1 493	53,4						
2005	945	40,6	3 566	62,9	1 445	54,4						
2006	944	41,1	3 537	63,0	1 412	55,5						
200 7	952	42,6	3 515	62,4	1 403	55,9						
2008	946	44,5	3 619	62,6	1 331	55,9						

			Fu	LL-TIME					Part	Part-time	
		cipal 1rers	Sen lectu	nior 1rers	Lectu	irers	Т	otal	Visiting lecturers	Guest speakers	
	Number	Women %	Number	Women %	Number	Women %	Number	Women %	Person-years	Person-yea	
Total	945,9	44,5	3 619,3	62,6	1 330,8	55,9	5 896,0	58,2	159,7	151,8	
Arcada	15	40,0	56	57,1	22	54,5	93	53,76	3,8		
Diaconia	24	75,0	157	81,5	181,0	80,7	9,6				
HAAGA-HELIA	46	50,0	254,3	66,2	70,5	50,1	370,8	61,1	5,2	5,6	
HUMAK	9	66,7	82	62,2	91,0	62,6	1,6	1,1			
Häme	73	35,6	165,8	58,7	47,8	57,9	286,6	52,7	5,3	2,4	
Jyväskylä	51,5	50,1	175,4	53,3	36,4	65,1	263,3	54,3	6,6	7	
Kajaani	11	54,5	50,2	62,0	38	47,1	99,2	55,4	0,1	3,6	
Kemi-Tornio	17,9	22,3	61,7	74,9	46,5	55,5	126,1	60,3	1,4	2,9	
Central Ostrobothnia	35,5	36,9	75,7	56,8	28,6	66,4	139,8	53,7	8,3	2,3	
Kymenlaakso	20,9	38,3	132,4	60,0	37,2	42,7	190,5	54,3	2,9	4,1	
Lahti	31,1	66,2	127,2	60,0	66,4	50,9	224,7	58,2	14,0	6,6	
Laurea	36,8	56,5	241,9	80,2	278,7	77,0	1,7	9,9			
Metropolia	114,6	35,5	376,2	58,5	122,3	56,4	613,1	53,8	33,1	8,8	
Mikkeli	26,8	62,7	112,5	64,8	36,4	57,7	175,7	63,0	7,8		
Oulu	71,8	47,4	188,9	62,9	117,5	52,6	378,2	56,8	10,3	8,8	
PIRAMK	27	63,7	101,2	81,2	49,8	71,3	178,0	75,8	7,9	2,1	
North Karelia	17,9	50,3	117,7	51,2	71,9	60,2	207,5	54,3	2,4	9,2	
Rovaniemi	20	65,0	93,5	52,5	29,5	72,9	143,0	58,5	1,5	3	
Satakunta	22	61,8	55,9	56,5	52,6	60,8	130,5	59,2	3,8	9,9	
Saimaa	40	32,5	172	63,4	66	51,5	278,0	56,1	13,3	4,5	
Savonia	49,8	46,0	155,7	62,7	77,7	50,7	283,2	56,5	6,2	13	
Seinäjoki	34,2	35,1	106,1	68,3	64,5	62,3	204,8	60,9	3,7	8,1	
TAMK	36	25,0	154	38,6	37,1	41,5	227,1	36,9	17,1	2,1	
Turku	63,6	39,3	206,1	66,0	144,7	59,7	414,4	59,7	3,5	13,6	
VAMK	31	32,3	90,2	49,3	29,4	53,4	150,6	46,6	2,0	1,9	
Novia	19,5	40,0	109,7	65,3	38	44,7	167,2	57,7	7,8	0,3	

	A19 Polytechnic teachers by field of study 2008											
	Full-time											
	Principal Senior Lecturers Total lecturers lecturers											
	Number	Women %	Number	Women %	Number	Women %	Number	Women %	Person-years P	erson-years		
Total	945,9	44,5	3 619,3	62,6	1 330,8	55,9	5 896,0	58,2	159,7	151,8		
Humanities and Education	75,5	60,9	125,5	67,7	13,1	77,1	214,1	65,9	6,2	2,8		
Culture	82,4	51,7	401,5	55,0	242,7	47,6	726,6	52,1	52,0	41,3		
Social Sciences, Business												
and Administration	120,5	53,4	663,1	66,8	218,7	60,9	1 002,3	63,9	27,1	17,2		
Natural Sciences	29,2	21,2	151,2	42,7	52	27,3	232,4	36,6	1,9	1,4		
Technology, Communication												
and Transport	373,1	15,8	779,4	26,1	332,3	26,9	1 484,8	23,7	38,7	29,4		
Natural Resources and												
the Environment	29,2	24,0	168	48,7	36,3	39,7	233,5	44,2	3,5	2,9		
Social Services, Health and Sports	201,7	84,2	1 142,2	88,4	358,2	87,7	1 702,1	87,8	24,4	50,3		
Tourism, Catering and												
Domestic Services	34,3	76,7	188,4	83,7	77,5	67,6	300,2	78,8	5,8	6,5		

Funding and expenditure

A20 Cost of ECTS credit in degree education by polytechnic and field of study 2007 (operating costs in 2006 divided by the number of ECTS credits completed in 2006–2007)

	All fields total	Humanities and Education	Culture	Social Sciences, Business and Administration	Natural Sciences	Technology, Communication and Transport		Social Services, Health and Sports It	Tourism, Catering and Domestic Services
Total	148	180	196	117	153	163	173	136	129
Arcada	177		298	177		240		138	124
Diaconia	151	197	182					148	
EVTEK*	153	191		111		160			
HAAGA-HELIA	126		133	113	163			167	127
HAMK*	184		258			196		153	160
HUMAK	190	182	212						
Häme	149		170	120	210	145	173	130	184
Jyväskylä	137		230	100	103	143	201	129	130
Kajaani	131	121	136	176	114	114			
Kemi-Tornio	160		174	136	179	209		137	
Central Ostrobothnia	142	168	231	108	112	148		128	133
Kymenlaakso	145		155	112	111	179	160	125	
Lahti	146		202	102	183	137		149	104
Laurea	146		165	127	146		164	164	138
Metropolia	174		237	111		179		153	160
Mikkeli	126	168	127	123	124	121	129	129	120
Oulu	149		181	107	139	164	245	131	
PIRAMK	125		207	105	108	202		115	115
North Karelia	158		242	132	156	153	187	122	137
Rovaniemi	139			122	136	159	137	126	139
Saimaa	131		153	102		165		106	133
Satakunta	146		182	120	153	159		151	111
Savonia	141		142	106	111	168	197	126	114
Seinäjoki	145		186	113	163	159	146	128	188
Swedish*	175		272			187		127	
TAMK	162		178	137	173	163	207		
Turku	147		209	126	160	158	135	122	147
VAMK	149			119	164	187		123	114
Novia	180	159	224	206		192	232	139	135
Sydväst*	185	159	166	206		202	232	159	135
Source: National Board of *) See data and concepts	Educatio	n							

	Ex	(PENDITURE				F	UNDING				
	Government subsidised activities	Fee-based services	Total*	Special government funding	Other special funding	Fee-based services	Unit price -based funding	Funding by maintaining organisation	Other funding	Total	Net expenditu
Arcada	14 445	708	16 064	408	1 959	870	12 309	0	991	16 537	-474
Diaconia	22 275	898	23 222	712	2 501	1 172	18 515			22 899	322
outh Karelia	16 061	2 224	18 292	517	543	2 369	15 771			19 201	-909
EVTEK	26 739	2 1 2 5	<mark>28 963</mark>	233	782	1 909	26 718		563	30 205	-1 242
HAAGA-HELIA	46 168	2 051	<mark>4</mark> 8 219	1 276	2 015	2 141	47 101			52 533	-4 314
HAMK	64 346	2 462	<mark>66 914</mark>	1 730	432	2 570	51 376			56 108	10 805
HUMAK	10 657	583	11 241	388	29	669	10 417		33	11 535	-295
Häme	38 462	12 118	<mark>5</mark> 0 580	1 228	1 402	12 051	37 957			52 638	-2 058
yväskylä	39 625	8 887	<mark>4</mark> 8 513	1 365	506	8 852	37 926		181	48 830	-317
Kajaani	10 958	1 975	12 957	210	214	1 997	10 376	600	24	13 420	-464
Kemi-Tornio	15 896	3 308	19 341	690	415	3 136	15 813			20 054	-714
Central Ostro <mark>bothi</mark>	nia 17 262	6 680	<mark>24 289</mark>	46	311	6 328	18 079		77	24 842	-553
Kymenlaakso	25 065	4 693	<mark>2</mark> 9 778	613	1 152	5 247	24 762			31 774	-1 997
.ahti	28 638	6 821	<mark>3</mark> 5 459	399	2 495	6 331	26 785			36 009	-550
aurea	40 818	1 890	<mark>4</mark> 2 708	1 346	2 028	2 497	38 490			44 361	-1 653
Aikkeli	23 728	12 581	37 132	690	257	13 000	24 120		45	38 113	-981
Dulu	45 017	6 487	52 252	956	631	6 722	42 568			50 8 77	1 375
IRAMK	21 590	1 850	2 4 007	648	883	1 995	21 941			25 467	-1 460
Jorth Karelia	24 500	4 070	28 569	611	1 050	4 435	22 727		18	28 840	-271
lovaniemi	16 256	5 713	21 969	876	521	4 839	17 080			23 316	-1 347
atakunta	32 668	2 921	35 613	689	182	3 001	31 550	46		35 469	144
avonia	37 947	10 120	48 484	697	814	10 940	38 899		204	51 554	-3 069
einäjoki	26 936	5 434	32 521	350	700	4 283	24 606	214		30 152	2 369
wedish	13 463	710,0	14 173	334	1 307	664,0	11 533			13 838	335
'AMK	34 908	4 543	39 451	1 378	578	4 424	29 331	4 1 2 6		39 837	-386
urku	54 900	4 073	58 973	1 852	2 023	3 850	52 157	190		60 072	-1 098
'AMK	17 530	1 653	19 236	253	194	1 683	17 171			19 301	-65
ydväst	11 786	2 604	14 390	332	586	2 463	11 568			14 950	-560
otal	778 646	120 183	903 310	20 827	26 511	120 438	737 646	5 175	2 1 3 6	912 733	-9 424

A21 Total costs, funding and net expenditure (1.000 €) in polytechnics 2007 (not incl. establishing projects)

Source: Expenditure report by the National Board of Education

International mobility

Studying abroad

In 2008, 3,976 Finnish polytechnic students participated in student and trainee exchanges abroad for three months or more. The average duration of studies abroad was 4.5 months. Students seeking most actively to study abroad were from the field of social sciences, business and administration (1,211 students) and the largest number of outgoing exchange students came from the HAAGA-HELIA Polytechnic (426 students).

In contrast, during 2008 Finnish polytechnics hosted 3,497 foreign students and trainees, the average duration of their visit being 4.6 months. As with those leaving Finland to study abroad, most of the incoming exchange students were from the field of social sciences, business and administration (1,499 students) and the most popular hosting polytechnic the HAAGA-HELIA Polytechnic.

Teacher and expert exchange

Teacher and expert exchanges to and from Finland consisted mainly of visits lasting less than one month. Teachers and experts from Finnish polytechnics made 57 visits lasting longer than a month, while 3,352 teachers made visits lasting less than that. Foreign teachers and experts made 67 visits to Finnish polytechnics lasting more than one month, and 1,921 visits lasting less than that.

80

al student and traine months) by polytee	
FINNISH VISITORS	Foreign visitoi

		VISITORS OAD		VISITORS JLAND
	Number	Duration average in months	Number	Duration average in months
Arcada	40	5,7	48	5,2
Diaconia	131	3,2	20	3,5
HAAGA-HELIA	426	4,7	283	5,3
Humanities	47	3,7	34	3,5
Häme	186	4,3	143	4,4
Jyväskylä	219	4,5	240	5,4
Kajaani	43	5,5	71	5,2
Kemi-Tornio	51	3,7	60	5,1
Central Ostrobothnia	128	4,2	114	4,7
Kymenlaakso	104	5,3	112	4,9
Lahti	164	4,7	160	5,0
Laurea	190	5,0	204	5,1
Metropolia	294	5,3	259	4,7
Mikkeli	75	5,6	107	4,2
Oulu	142	4,5	250	4,7
Pirkanmaa	150	4,2	123	4,0
North Karelia	121	4,0	82	4,3
Rovaniemi	128	3,9	89	5,2
Saimaa	129	4,5	130	4,3
Satakunta	194	4,6	110	4,7
Savonia	186	4,4	187	4,6
Seinäjoki	128	4,4	202	3,9
Tampere	183	5,0	167	4,6
Turku	325	4,2	197	4,8
Vaasa	119	3,8	66	4,2
Novia	73	4,5	39	4,5
Total	3 976	4,5	3 497	4,6

A23 International student and trainee exchange (over 3 months) by field of study 2008

(
	Finnish abro	VISITORS DAD		i visitors NLAND
	Number	Duration average in months	Number	Duration average in months
Humanities and Education	48	3,6	26	3,5
Culture	487	4,9	377	4,7
Social Sciences, Business				
and Administration	1 211	5,0	1 499	5,1
Natural Sciences	97	4,9	41	5,7
Technology, Communication				
and Transport	662	4,9	670	4,9
Natural Resources and				
the Environment	141	4,2	104	4,3
Social Services, Health and Sport	s 752	3,3	537	3,5
Tourism, Catering and				
Domestic Services	578	4,4	243	4,8
Total	3 976	4,5	3 497	4,6

		Over on	ie month	[Under of	NE MONTH	
		n visitors road		n visitors inland		h visitors proad		gn visitors Finland
	Number	Duration in months	Number	Duration in months	Number	Tot. months	Number	Tot. months
Arcada					78	46,1	25	11,5
Diaconia					90	34,0	26	11,0
HAAGA-HELIA					321	123,4	186	66,7
Humanities					38	19,3	20	10,3
Häme	3	3,0			134	69,1	75	34,3
Jyväskylä	5	1,2	6	1,3	339	144,2	318	110,5
Kajaani	2	1,0	2	1,0	58	36,6	9	8,0
Kemi-Tornio					62	22,6	23	11,0
Central Ostrobothnia	. 1	1,0	4	2,0	71	42,4	40	24,6
Kymenlaakso	1	1,0			44	33,0	48	16,6
Lahti			13	1,8	86	42,5	46	27,5
Laurea	1	2,2	2	1,3	90	57,9	40	22,5
Metropolia	2	1,0	2	1,9	263	109,2	135	62,0
Mikkeli	3	1,0	5	1,0	113	69,4	48	26,8
Oulu	1	1,0	1	1,0	156	74,7	109	55,8
Pirkanmaa					169	75,4	128	49,3
North Karelia	3	1,0	1	1,0	126	63,9	48	32,5
Rovaniemi	4	1,0	7	5,1	73	38,5	27	15,3
Saimaa	7	1,1	5	1,4	46	25,3	46	23,8
Satakunta	2	1,9			58	33,1	26	17,1
Savonia	6	1,2	2	5,5	153	79,3	113	49,6
Seinäjoki	9	1,4	4	1,2	235	83,5	133	52,1
Tampere	4	2,9	7	2,7	199	102,7	130	61,6
Turku	2	2,5	2	1,0	190	102,3	33	17,1
Vaasa	1	1,0	1	3,0	86	49,1	50	20,3
Novia			3	1,7	74	46,6	39	20,3
Total	57	1,5	67	2,0	3 352	1 624	1 921	858

A24 International teacher and expert exchange by polytechnic 2008

Research and development

A25 Research and development activities in polytechnics: research expenditure, research person-years and share of external funding by polytechnic 2002–2007											
	Research expenditure			Research person-years					External funding % of research		
			Change				(Change	EXPENDITURE		
	2002	2004	2006	2007	07 %	2002	2004	2006	2007	0 7 %	2007
Arcada	347	722	1 278	1668	30	4	8	13	13		82
Diaconia	1 399	2 013	2 785	3 791	36	25	33	33	32	-3	65
EVTEK	1 345	3 576	2 010	1 474	-26	16	23	25	28	10	82
Haaga Polytechnic	192	1 881	720			2	16	9			
HAAGA-HELIA				1 979					28		56
Helsinki	1 1 1 0	1 803	1 751	3 769	115	34	26	41	54	33	29
Helsinki Business College	1891	3 372	745			16	41	10			
HUMAK	68	503	1 577	1 1 2 4	-28	1	8	21	17	-15	60
НАМК	3 229	7 089	7 494	6 537	-12	82	104	118	108	-8	84
Jyväskylä	5 1 1 0	7 333	8 479	6 413	-24	74	105	116	117	1	57
Kajaani	1 678	1 783	1 754	2 872	63	15	20	30	40	32	100
Kemi-Tornio	2 103	3 0 4 2	3 356	3 993	19	29	34	59	66	11	81
Central Ostrobothnia	1 999	2 493	3 1 4 2	3 755	19	57	65	64	84	30	93
Kymenlaakso	1 407	2 1 2 3	3 477	3 003	-13	20	38	53	46	-13	93
Lahti	1 008	1 993	4 764	6 487	36	23	28	78	84	8	73
Laurea	977	3 706	7 342	7 713	5	19	42	80	88	9	35
Mikkeli	3 783	7 035	7 107	8 812	24	59	83	87	124	42	94
Oulu	2 462	4738	6 2 3 6	7 738	24	61	61	81	89	10	59
Pirkanmaa	897	1 365	1 444	2 1 3 3	47	16	27	27	36	31	65
North Karelia	5 812	5 643	7 510	6 253	-16	46	59	82	84	2	72
Rovaniemi	2 4 4 4	3 288	2 556	3 7 2 6	45	32	41	42	60	43	89
Saimaa	982	1 155	1 645	1 198	-27	14	18	18	21	15	83
Satakunta	3 713	4 795	2 820	3 1 1 9	10	70	62	43	51	17	100
Savonia	3 975	4 724	8 0 5 9	8 467	5	81	117	112	129	15	92
Seinäjoki	3 097	4 193	4 489	4 210	-6	52	56	78	64	-17	80
Swedish Polytechnic	749	1 251	1 269	1 162	-8	16	19	19	15	-18	90
Tampere	324	2 701	2 590	2 700	4	6	28	34	36	5	77
Turku	1 971	2 800	6 779	7 857	15	40	40	120	139	15	52
VAMK	963	1 136	2 266	2 601	14	9	10	31	34	9	34
Sydväst Polytechnic	585	457	773	1 264	63	7	8	11	20	80	65
Polytechnics total	55 628		106 217		15	936	232	1 543	1 719	13	73
Source: Statistics Finland	<u> </u>	/ -0						0	- / -/		/0

Studies

Other education

In 2008, a total of 5,237 students pursued specialisation studies in polytechnics. Most of these studies were completed in social services, health and sports, with 2,425 students taking courses, 92.7 per cent of them women.

The number of students attending Open University studies was 15,640. In a sectoral comparison, the largest number of specialisation studies was pursued in social services, health and sports (5,705 students). The largest organiser of Open University education was the Central Ostrobothnia Polytechnic, with 3,708 students attending its courses. In 2009, the number of students in polytechnic teacher training was 3,817. The number of applicants to polytechnic teacher education was 7,814, and 1,569 students eventually enrolled in the studies.

Polytechnic education provided in a foreign language

In 2008, polytechnics organised instruction given in a foreign worth a total of 30,566 ECTS credits, most of which (98.5%) was given in English. Foreign students were provided with courses in Finnish and Swedish.

In sectoral comparison, over one-third of the instruction given in a foreign language was provided in social sciences, business and administration (11,865 ECTS credits). Of the total amount of instruction given in a foreign language, 23.7 per cent (7,355 ECTS credits) were provided in technology, communication and transport and 13.9 per cent (4,297 ECTS credits) in social services, health and sports.

In addition to English, Finnish and Swedish, the other languages of instruction were German (88 ECTS credits), sign language (47 ECTS credits), French (14 ECTS credits), Russian (10 ECTS credits) and Danish (3 ECTS credits).

Theses

In 2008, 21,632 theses were completed in polytechnics. Of these, 81.6 per cent were project based. The most project-based theses were submitted in technology, communication and transport (91.1%) and the least in culture (63%). In quantitative terms, the largest number of these was completed in social services, health and sports (6,508).

Data and concepts

Universities

University acronyms HY University of Helsinki IY University of Jyväskylä OY University of Oulu ISYO University of Eastern Finland* JoY University of Joensuu* KY University of Kuopio* TY University of Turku** TYO University of Turku** TaY University of Tampere ÅA Åbo Akademi VY University of Vaasa LY University of Lapland AYO Aalto University*** TKK Helsinki University of Technology*** TTY Tampere University of Technology LTY Lappeenranta University of Technology HKKK Helsinki School of Economics*** SHH HANKEN - Swedish School of Economics and Business Administration TuKKK Turku School of Economics** TaiK University of Art and Design Helsinki*** SibA Sibelius Academy TeaK Theatre Academy KuvA Academy of Fine Arts

* On 1 January 2010, the universities of Joensuu and Kuopio will be merged into the University of Eastern Finland

** On 1 January 2010, the University of Turku and the Turku School of Economics will be merged into the new University of Turku *** On 1 January 2010, the Helsinki University of Technology, the Helsinki School of Economics and the University of Art and Design Helsinki will be merged into the Aalto University

KOTA database

The KOTA database is maintained by the Ministry of Education, and it describes the activities of universities. The KOTA OnLine Service offers everyone an opportunity to utilise the database material without specific authorisation. KOTA OnLine and the instructions for its use can be found at http://kotaplus.csc.fi:7777/online.

The following section contains statistical tables compiled from the Kota database and descriptions of its content and use. The publication data have been collected since the 2008 update. The corrections in the database made afterwards by the universities do not appear in the tables. Database contact person: Senior Advisor Jukka Haapamäki, Tel.+358 9 1607 7227, jukka.haapamäki@minedu.fi

Data definitions

The definitions of the data used in the tables of the publication are available from the KOTA database at <u>https://kotaplus.csc.fi/online/pages/valintahelp/KOTA-kasikirja_2007.pdf</u>

Polytechnics

Number of educational institution and name of polytechnic¹

02535	Arcada Polytechnic	02629	Laurea Polytechnic
02623	Diaconia Polytechnic		Metropolia Polytechnic**
02609	South Karelia Polytechnic		Mikkeli Polytechnic
02468	Haaga Institute Polytechnic*		Oulu Polytechnic
02474	EVTEK Polytechnic**	02471	PIRAMK Polytechnic****
10056	HAAGA-HELIA Polytechnic*	02649	North Karelia Polytechnic
02624	Helsinki Polytechnic Stadia**	02538	Rovaniemi Polytechnic
02503	Helsinki Business Polytechnic*	02507	Satakunta Polytechnic
02631	HUMAK Polytechnic	02537	Savonia Polytechnic
	Häme Polytechnic	02472	Seinäjoki Polytechnic
02504	JAMK Polytechnic	02508	Swedish Polytechnic, Finland**
02743	Kajaani Polytechnic	02466	Tampere Polytechnic****
	Kemi-Tornio Polytechnic	02509	Turku Polytechnic
02536	Central Ostrobothnia Polytechnic	02627	VAMK Polytechnic
02608	Kymenlaakso Polytechnic	10066	Novia Polytechnic***
02470	Lahti Polytechnic		Sydväst Polytechnic***

* On 1 January 2007, the Haaga Institute Polytechnic and the Helsinki Business Polytechnic were merged into the HAAGA-HELIA Polytechnic

** On 1 August 2008, the EVTEK Polytechnic and the Helsinki Polytechnic Stadia were merged into the Metropolia Polytechnic

*** On 1 August 2008, the Swedish Polytechnic, Finland, and the Sydväst Polytechnic were merged into the Novia Polytechnic

**** Tampere and Pirkanmaa Polytechnics merge into Tampere Polytechnic on the first of january 2010

Education authorities' classification of fields of study

- 10 Humanities and Education
- 20 Culture
- 30 Social Sciences, Business and Administration
- 40 Natural Sciences
- 50 Technology, Communication and Transport
- 60 Natural Resources and the Environment
- 70 Social Services, Health and Sports
- 80 Tourism, Catering and Domestic Services
- 90 Other education

AMKOTA database

The AMKOTA database is maintained by the Ministry of Education. It provides statistics on the activities of the polytechnics presented by the polytechnic and by the field of study. Currently there are statistics available for the years 1997-2008.

AMK information service

The AMK information service <u>http://amkota.minedu.fi:8080</u> is a portal maintained by the Ministry of Education to serve polytechnics, authorities and various interest groups. It includes statistics and concept definitions relating to polytechnic education. The portal also provides access to information systems maintained by education authorities and serving polytechnic education. The 'Available reports' (Valmisraportit) section includes statistical reports in html, pdf and Excel formats; the 'Online reports' section opens a list of dynamic workbooks that enable sampling from the AMKOTA database.

The Contact person for the database is: Planning Officer Kaisu-Maria Piiroinen, Tel.+358 9 1607 7303, kaisu-maria.piiroinen@minedu.fi

¹ In this publication the Ministry of Education uses the term "polytechnics" according to the official practice. Most of these institutions use the term "university of applied science" in their own use.

Centres of excellence

The centres of excellence in university education nominated by the Finnish Higher Education Evaluation Council 2010–2012

UNIVERSITY OF HELSINKI Faculty of Pharmacy Department of Computer Science **UNIVERSITY OF JYVÄSKYLÄ** Department of Physics UNIVERSITY OF LAPLAND Department of Social Work LAPPEENRANTA UNIVERSITY OF TECHNOLOGY Department of Industrial Management UNIVERSITY OF OULU Department of Educational Sciences and Teacher Education Department of Process and Environmental Engineering UNIVERSITY OF ART AND DESIGN HELSINKI School of Motion Picture, Television and Production Design HELSINKI UNIVERSITY OF TECHNOLOGY Department of Computer Science and Engineering **UNIVERSITY OF TURKU** Faculty of Medicine

The centres of excellence in polytechnic education nominated by the Finnish Higher Education Evaluation Council for 2008–2009

HAAGA-HELIA POLYTECHNIC

Degree Programme for Multilingual Management Assistants LAUREA POLYTECHNIC Security Management unit ROVANIEMI POLYTECHNIC Degree Programme in Nursing and Health Care SAVONIA POLYTECHNIC

Development of entrepreneurship in the Degree Programme in Agriculture and Rural Development TURKU POLYTECHNIC Degree Programme in Construction Management

The centres of excellence in adult education nominated by the Finnish Higher Education Evaluation Council for 2007–2009

Helsinki School of Economics University of Jyväskylä Helsinki University of Technology University of Turku National centres of excellence in research nominated by the Academy of Finland for 2008-2013 UNIVERSITY OF TURKU CoE in Integrative Photosynthesis and Bioactive Compound Research at Systems Biology Level (University of Turku, University of Helsinki) CoE in Host Defence Research (University of Turku, University of Helsinki, National Public Health Institute) CoE in Public Choice Research (University Of Turku, Turku School of Economics) CoE in Molecular Imaging in Cardiovascular and Metabolic Research (University of Turku, Åbo Akademi, Turku University Hospital) HELSINKI UNIVERSITY OF TECHNOLOGY CoE in Generic Intelligent Machines Research (Helsinki University of Technology, Tampere University of Technology) CoE in Smart Radios and Wireless Research (Helsinki University of Technology) UNIVERSITY OF TAMPERE CoE in Research on Mitochondrial Disease and Ageing (FinMIT) (University of Tampere, University of Helsinki) **UNIVERSITY OF HELSINKI** CoE in Philosophical Psychology, Morality and Politics (University of Helsinki, University of Jyväskylä, Renvall Institute) CoE in Physics, Chemistry, Biology and Meteorology of Atmospheric Composition and Climate Change (University of Helsinki, University of Kuopio, Finnish Meteorological Institute) CoE in Analysis and Dynamics Research (University of Helsinki, University of Jyväskylä) CoE in Microbial Food Safety Research CoE in Molecular and Integrative Neuroscience Research CoE in Foundations of European Law and Polity Research (University of Helsinki, Åbo Akademi, University of Turku, University of Lapland, University of Tampere, Stakes) CoE in Algorithmic Data Analysis Research (University of Helsinki, Helsinki University of Technology) VTT TECHNICAL RESEARCH CENTRE OF FINLAND CoE in White Biotechnology - Green Chemistry Research Åbo Akademi University CoE in Functional Materials (Åbo Akademi, University of Helsinki) UNIVERSITY OF JYVÄSKYLÄ CoE in Interdisciplinary Music Research (University of Jyväskylä, University Of Helsinki) UNIVERSITY OF KUOPIO CoE in Cardiovascular Diseases and Type 2 Diabetes Research (University of Kuopio, University of Oulu) The centres of excellence in artistic activity for 2007-2009 UNIVERSITY OF OULU Department of Architecture

UNIVERSITY OF ART AND DESIGN HELSINKI Education Programme in Graphic Design THEATRE ACADEMY Department of Theatre and Drama

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*) In this publication the Ministry of Education uses	the term "polytechnics" according to the official practice.

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