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Enhancing Universities in Finland

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CONTENTS

- 1. The role of higher education in Finland and Japan
- 2. Demand for productivity
- 3. Evaluation as a tool for governance
- 4. Academic professions narrowing role
- 5. Challenges for Finnish higher education

Enhancing Universities in Finland

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Finnish society is stable and based on welfare principles, and the aim of education is to promote cultural rights as well as the knowledge and skills required for active citizenship. Behind these goals are the need for more flexibility and better access to higher education, better responsiveness in global higher education markets, information and communication technologies and the ageing society. The Finnish education system has gained a favourable reputation in recent years, but the needs for reforms are evitable. This article discusses demands for Finnish higher education to improve productivity and efficiency and higher education institutions response for these demands. The focus of analysis is on Finnish university system compared with Japanese university corporations. In the statistical documentation, the situation is compared in 2006 primarily with the situation at the turn of the Century and also in the middle of the 1990s. These are the important turning-points of Finnish higher education reforms.

1. The role of higher education in Finland and Japan

Every European country has its own unique higher education system that has evolved over a long period of time. National traits in higher education systems are more a rule than an exception. For example, the OECD Thematic review of Tertiary Education on Finland 2006 referred to the Finnish struggle for independence and national identity to characterise Finnish tertiary education. However, Maurice Kogan (2002, 46) has noted that it is difficult to see what impact these might have had on higher education policies and practices.

In Finland, the contemporary concept of higher education refers to *universities and universities of applied sciences (polytechnics)*. Within the Ministry of Education, these responsibilities were divided up to 2007 to two divisions: the University division and the Polytechnic division were located in the Department for Education and Science Policy. They were responsible in their respective areas for focused tasks such as the preparation of legislation and other statutory instruments, the preparation of budgets and the Ministry's action and economic plans, performance management, student admissions and international co-operation.

The Ministry of Education has restructured its organization in 2007 and merged divisions into the Division of higher education and science.

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In Japan, 'higher education' refers to *universities, junior colleges, colleges of technology and specialized training colleges.* The universities of applied science in Finland and specialized training colleges in Japan have many similar characters and in functions in the higher education system. Within the Ministry of Education (MEXT) the Higher Education Bureau is responsible e.g. for the formulation of basic policies in the field of higher education, for university entrance examinations, the conferring of degrees, those duties related to student welfare guidance, the scholarship loan program, and the promotion of student exchanges.

The Finnish higher education steering system reflects the state supervision model of governance with strong national ministry-level control and strong university autonomy (see. Maassen 2003, 42-43). Finnish Universities are self-governing, as is provided in legislation (Constitution, Section 123). In 2007, there are 20 universities in Finland under Ministry of Education, of which 10 were multidisciplinary universities, three were universities of technology, three were schools of economics and business administration and four were art academies. All Finnish universities are state run and receive their core funding from the state budget. In 2006 there were about 152 000 undergraduate students in the Finnish university system, and about 21 900 postgraduate students (KOTA 2007). In 2006 about 129 900 student studied in degree programs in the 28 universities of applied sciences under the Ministry of Education (AMKOTA 2007).

In both Japan and Finland, the populations are ageing and the share of 18 year olds in the population is declining – as number of population in all was growing in Finland in 2006. As a consequence, the size of higher education sector in Finland is the subject of discussion, including the number of higher education institutions in the country. With the stagnant economy and changes in employment practices over the past decade, an increasing number of tertiary education graduates are unable to find continuous and steady jobs (OECD 2006a, 33). This phenomenon concerns Japan as well as Finland, and in the long term it will affect students' motivation to access higher education programmes in those study fields with poor employment prospects.

From the selectivity ratio point of view about 65% of the age cohort coming to higher education studies has admission to degree studies in Finnish higher education institutes. But due to competition of studying places, extended studies of some students and some drop outs as well as study places being taken by mature age students, the participation ratio of graduates in the 25-34 age group is less than 50%. Admissions for universities and universities of applied sciences are based on principle of restricted entry (numerus clausus), i.e part of applicants for study places are not accepted even if they are eligible according to restriction. It is typical of the Finnish higher education system that the number of non-degree students is quite high, due to university extension

studies centers and traditional summer university organizations' active role. In Japan the share of part-time and non-degree students is clearly smaller than in Finland, but in both countries need for lifelong learning is increasing.

Martin Trow has classified the nature of higher education systems, and this analysis is vital into the twenty-first century. His idea is based on enrolment ratios, where a rate below 15% of each age cohort level refers to an elite higher education, with a range of forms of higher education other than elite universities available to students (Trow 1999, 315). A rate between 15-50 % refers to massification of higher education, and rate over 50% refers to universal access to higher education. This represents a difference between the Japanese and Finnish higher education systems. Finland is still about to reach universal access, but Japan has been there for years.

Akito Arima (2003, 11-14) has paid attention to the phenomenon, as a number of universities have to focus on teaching rather than research, as student enrolment ratio reaches about 25% of each new age group access in higher education. And when the enrolment ratio reaches 30% or more, it will be not possible to offer the elite type of higher education. Arima refers to Burton Clark's idea on transformation of higher education teaching, which can converge with secondary education, which is serious problem in the USA and takes place also in Japan. Finland with growing higher education intakes has faced the same problem.

In Japan universities are encouraged to clarify their identity and distinctiveness by Ministry of Education (MEXT). Universities role may focus on the tasks of centres of excellence or by fostering professionals by providing them with advanced special skills or special fields. Some universities focus on comprehensive liberal arts education, education and research in special areas such as Arts or Athletics and some universities are efficient centres for lifelong learning. Some universities contribute to society in areas such as triple-helix (university-government-industry-relations) or local social impact. Most universities act in all fields, but emphasise some areas more than others.

The means used by the state for steering universities in Finland are appropriation, statutes, and 'steering by information'. Every four years the Government approves a development plan for teaching and research that defines the guidelines for teaching and research policies. For instance, the 2003-2008 development plan for teaching and research is preparing for smaller age groups, to increase the influence of regional development, and globalisation.

In addition to development plans, performance agreements between the Ministry of Education and the universities are used by the State to help to maintain control over universities. Performance negotiations to decide on performance agreements are held every year. On the basis of the performance negotiations between the Ministry of Education and universities, performance agreements are drawn up for the next three years with required adjustments made annually, containing agreements on the functional and quantitative objectives of universities, the appropriations needed to achieve those objectives, the follow-up and evaluation of the achievement of the objectives, and on the development of operations (see. MoF 2006b, 24). The Ministry of Education also gives universities annually a written closing statement on their operations. From the point of implementation, the performance agreements and follow-up systems between the Ministry of Education and the universities form a central part of the governance system. The development of universities' performance is monitored using the KOTA database maintained by the Ministry of Education. The KOTA system is used to implement the annual information exchange for the performance negotiations between the ministry of education and universities, and other reporting.

The development of Finnish administration since the 1990s has been based on corporate state models and reduction of state's role. In this process the university sector is emerging as the largest field of the state sector. Corporate thinking has contributed to the centralisation of support services and to a limited extent to a more flexible transfer of resources within the corporate state.

The introduction of a corporate model has increased university autonomy in Japan and it should increase university autonomy in Finland, too. In the core of corporatization in Japan there is adaptation of Independent Administrative Institutions (IAI) model, and the core of reform is increasing freedom in operations of institutions in exchange for strengthening accountability for results (Yamamoto 2006, 40). There have been various university reforms in Japan since 1998, and establishing National University Corporations appears as a key reform in Japanese higher education. According to Kiyoshi Yamamoto (2004) it is more than an organisational reform to change the autonomous role of National Universities by establishing the Corporate Model. IAI model will be rather an outcome of internal government politics than an attempt to solve perceived problems of the university sector (Goldfinch 2004, 254).

Akito Arima (2003, 21) has emphasised that autonomy does not imply that all relationships with society should be cut, and autonomy has two elements. First, it means the freedom to decide on the content of teaching and research. Second, a condition necessary for this kind of autonomy to be realised is sufficient financial support. Furthermore, it means freedom to select people appropriate to this purpose. For example, up to the 1998 the appointment of permanent professors in Finnish universities was carried out by the head of the state, the President of Republic.

This confirmed the status of professors as civil servants, but not in any way increased universities' autonomy, but rather reinforced the extent of government control.

Comparing the Finnish and Japanese higher education systems is restricted by the fact that both are unique. Although the names of many institutions are the same in English, they often refer to quite different things. In addition to national universities based on the National University Corporation model (*Kokuritsu daigaku hojin*) there is an extensive local public and private higher education sector in Japan. In both countries, education has played a central role in the modernisation of society. In Japan, private higher education has been an important feature in the growth of higher education, as the idea of the Humboldtian research university is strong, as it is in Finland. A characteristic of the Japanese system has been traditional growth with a hierarchy of universities (Geiger 1986, 14-15). At the top of the hierarchy there are national universities traditionally with high levels of academic prestige and government support.

Some universities are more prestige-seeking than others and investing in reputation (Brewer et.al. 2002, 35). However, as Geiger (1986) has pointed out, it is pointless to compare the rank of dissimilar universities. For example, in the Asia-Pacific region universities are generally moving to models of greater autonomy, and governments need a new set of criteria on which to base public allocations to universities. According to William Cummings, in principle it is possible to rank universities and distribute funds through block grants adjusted by ranking (see. Cummings 2006, 14). Nor Finland neither Japan has implemented these proposals.

National universities in Japan fulfil national educational needs, but there are other institutions of lower levels of prestige. Newer institutions are often smaller and more limited in scope tend to be of lower prestige. These institutions include the less costly stratum of state colleges which provide training for specialists in certain disciplines.

During the periods of rapid growth certain areas have offered great opportunities for specialised schools to expand their programmes and to enhance their status. In Japan, tradition is changing in the 2000s due to the establishment of the Corporate university model, in terms of them becoming semi-public corporations which no longer employ public servants (Arima 2003, 21).

Still, ranking, reputation and prestige are important in real life. The differences in student selection, teacher per student ratios, library size and campus amenities have become a critical part of institutional reputation. An institution's reputation is generally known and is significant in terms of students' choices and employer preferences (Geiger 1986, 14). In addition, there are

differences in the financial basis of research, because some universities rely more on public or government funding, and others seek out private funding. Some universities are conscious of the academic oligarchy and others listen carefully to their stakeholders. They all look for the inherent value of legitimacy, which is a key to the sustainable growth of higher education institutions.

In the system of universal access to higher education, not all university education can be based only on the idea of the Humboldtian research university. Over the last 15 years, Finnish higher education has provided two parallel systems: universities and polytechnics (universities of applied sciences). Higher education expanded as recently as the 1990s with the founding of the polytechnic system. It was a policy of the Finnish government at the beginning of the 1990s to channel higher education growth into universities of applied sciences, which were developed through mergers between various former post-secondary institutions (MinEdu 2001, 10). It may sometimes be difficult for higher education experts in Japan to see the difference between Finnish universities of applied sciences and universities. Some polytechnics are using the translation "University of applied sciences" in their English names, and some use "Polytechnics". This is undoubtedly a very descriptive name indicating the contents of the institutions' operation and their level of education. The Ministry of Education has had a reserved attitude towards this translation.

The polytechnic system was established in the early 1990s, and the Polytechnics Act (2003/351) decrees that a licence for managing a polytechnics (university of applied sciences) can be granted to local authorities (municipalities) or a joint municipal body (municipal federation), to the state, or to private organisations (a registered Finnish Limited Company or Foundation). Their operating licence as well as their core funding is granted by the Government. According to Polytechnics Act (9.5.2003) they provide teaching, research and development to serve teaching, working life and regional development.

Universities of applied sciences provide instruction in subjects from several disciplines, leading to degrees with professional emphasis, and they strive to maintain close connections with the employment market. They provide instruction in subjects from several sectors leading to degrees which emphasise professional practice. The English translations "Bachelor" and "Master" are used as titles of the polytechnic degrees in the Bologna process. Academic drift seems to be taking effect with degrees although the degree titles the institutions provide are different – the professional aspect being emphasized in the universities of applied sciences while the emphasis in universities is on more theoretical study.

As Sakari Ahola so aptly puts it, universities and polytechnics are "different but equal" (Ahola

269

1997). He is referring to the British binary system of the early 1990s. The Finnish universities of applied sciences (polytechnics), however, resembles primarily the Fachhochschule in the dual model used in Germany. Great Britain unified the two systems in the early 1990s by granting polytechnics a university status, but this is not a case in Finland. The Finnish Ministry of Education's negative stand towards the translation "University of applied sciences" is based on the fact that no change in legislation resembling the one in Britain has been made in Finland. On the other hand, the use of desired translation is a matter of polytechnics' autonomy, and the Ministry cannot prohibit the use of the "university of applied sciences" translation.

One difference of note between Japan and Finland relates to the Japanese private higher education sector. In Finland massification in higher education in the 1960's took its concrete form in regional policy and by institutional diversity in the university sector. The expansion of higher education between the 1950's and the 1990's meant establishing institutions which were needed all over the country, and that there should be provincialisation or localisation of higher education. The foundation of polytechnics can be seen as an extension of this national policy (Välimaa 2004, 42). From this angle, the massification in the 1990s took place initially by the establishment of a polytechnic sector (Hölttä and Malkki 2000). In Japan the massification took place through the huge Japanese private sector, which since 1950s has had more in common with the United States than any country in Europe (see Clark 1983, 131). In 2005 76.2% of all university students in Japan were studying at private sector universities (MEXT 2006b, 80).

The demand for higher education is definitely growing in some disciplines but there are others where decline is evident. This is natural development of changes in demand, and public universities have a history of being unable to swiftly respond to these changes. Although the age groups are becoming smaller, the proportion of high school graduates in each age group over the next 10 years will continue to grow. In fields where the demand for education is growing it is possible to establish publicly funded programmes. There are, however, two major restrictions to their use. Firstly, experiences from the outcome of extensive programmes are partly negative as the results have been modest (Aarrevaara & Kivisto 2006). Secondly, universities cannot increase their capacity according to the changing demands in the labour market and, therefore, the use of foreign training programmes creates new possibilities to provide flexibility at a lower cost than by expanding the university institution. This is why it is also in tax-payers interest to support studies abroad.

The WTO-led General Agreement on Trade in Services (GATS) covers higher education and introduces four modes (Scott 2005, 18). In addition to publicly funded programmes Finland can choose between three alternative approaches enabled by the GATS agreement. It is interesting to notice that of the GATS alternatives Finland has adopted the "consumption abroad" alternative only. From the state's point of view, it is a cost-effective alternative, but it means that consumption will take place in a foreign country.

At the beginning of the 1980s universities in Finland as well as in Japan responded to domestic needs, and their level of internationalisation in educational task was quite low. In Japan the government introduced a process in 1983 in order to increase the number of international students studying in Japan. The main focus was the "100 000 by 2000" plan, which aimed at having 100 000 international students studying at higher education institutions in Japan by the year 2000 as part of an intellectual international cooperation (Horie 2002, 66-67).

In 1983, the number of international students studying at Finnish universities was 766, more than half of them from Europe and about one fifth from Asia. The number of international students was, however, only about 0.9% of the total number of students in the university sector. In 1983, there were 10 428 international students studying in Japanese universities, and most of them were in private universities. The total number of international students in 2005 in the whole Japanese university sector was 121 812, including 9891 Japanese government scholarship students and 1903 foreign government sponsored students and 110 018 privately financed students (OECD 2006a, 223). The number of foreign students in Japan has increased strongly during last two decades in spite of private student contributions.

So far, the number of international students in Finland has not grown as quickly as in Japan over the past 20 years. In 2005 the Finnish universities had 3449 international students studying Master's degrees. There was also an additional 1500 foreign postgraduate students (Minedu 2006a). Still, during last years there have been more foreign students coming to Finland than there are Finns going abroad. The number of international students studying for a university degree in Finnish universities rose in 2004-2005 being 3449 and the Ministry's objective for 2007 is 5400 international degree students (MoF 2006a). In addition, the number of international students studying for a polytechnic degree has grown so that in 2002 there were 3130 international students in polytechnics to 4300. In absolute terms, these numbers are not great as the Ministry's objective means that only 9700 international students are studying for a degree in higher education institutions. Still, the growing numbers indicate the direction in which universities and universities of applied sciences should be going.

271

The aim of the Finnish Government is, that by the end of the present decade 8,000 students in universities of applied sciences and 6,000 university students annually will study a part of their degrees abroad and a corresponding number of exchange students will study in Finland (MinEdu 2004a, 44).

2. Demand for productivity

In Finland all universities are state accounting offices. This means that the core funding for universities is defined in the state budget approved by the Parliament. The Budget Act and Statute, the University Act and Statute, and the Basis of Payment Act and Statute comprise the legislation that forms the basis for the economic rules specific to each university and these regulate the universities' functions. These spending rules are laid down in the Government Programme and need to be strongly applied to the annual budget process (Kinnunen 2006). This principle ensures that medium and long-term considerations are taken on board.

Operating and financial submissions made in January outline spending for the three years beyond the budget year. Still, they do not play a significant role and are changed for each budget with little reference or reconciliation with the previous year's figures, because the determination of the state budget one year at a time is written into the Constitution (Hemmings, Turner & Parviainen 2003, 10). The operating and financial plans provide the necessary information for the implementation and control of the Government's economic policy.

The university-specific economic rules are quite different from each other as the University Act guarantees the University of Helsinki and Åbo Akademi the right to manage their own funds. They are either long-term possessions or established rights. An Act to entitle universities to secure the rights to utilize inventions made in universities came into force on January 1, 2007. Act on the right to university inventions (369/2006) entitles universities and researchers to secure their legal rights and compensations for the utilization of their intangible properties.

Because universities are a part of the state administration, their financing in state budget consists of operating expense appropriations and supplementary funding. Operating expenses consist of basic funding, project funding, and performance based funding. The main sources of supplementary funding are funding for operations jointly with other parties, charged services, donations, and sponsor funding. The average direct state funding to universities was 64.5% of their expenses in 2005, and the percentage varies between universities. The target level for supplementary funding for each university is discussed in performance negotiations between the Ministry of Education and universities. Teaching, research, social impact, and differences in the cost structures of different fields of education (field-specific coefficients) determine the percentage of state share in funding.

The Ministry of Education provides funding through national programmes (university-specific national areas of responsibility) and through performance funding. The universities' performance funding is primarily determined on the basis of the numbers of Master's and Doctor's degrees. In addition, the quality and social and regional impact of operations are among the central grounds for separate performance funding. The share of research in performance funding will probably increase over the coming years. The universities' internal fund distribution models do not need to follow the distribution model which applies between the Ministry of Education and the universities.

The distribution of university teaching and research in the State Budget and supplementary budgets in 2005 was 21.9% in the budget field of teaching, research and cultural appropriations. The share for financial aid for students was 12%, vocational education 9.4% and adult education 5.2%. The share of polytechnics in state budget was just 5.7%. Attention should be paid to the fact that in the main, the licence holders of polytechnics are municipalities in the local government system, and they record the polytechnics' expenses in their own budgets. The government provides 57% of the core funding for polytechnics and local authorities the remaining 43%, based on their populations (MinEdu 2004b).

About 80% of the state funding for the national innovation system is mainly funneled through the Ministry of Education and the Ministry of Trade. The main funding organisations in the Finnish innovation system are the Academy of Finland, the Finnish Funding Agency for Technology and Innovations (TEKES) and the Finnish Innovation Fund (Sitra). Their role in higher education will be consolidated by establishing a new Ministry of Labour and Industry in 2008. In this new "super-ministry" there will be assigned the duties of the existing Ministry of Trade Industry, the tasks of the Ministry of Labour, excluding migration and integration matters, and the functions of the Department for Development of Regions and Public Administration of the Ministry of the Interior, excluding the Regional and Local Administration Unit. Also the steering system for sector research will be promptly overhauled by the end of year 2008 (Govt 2007).

The Academy of Finland provides funding for universities and research institutes. It funds researchers and research projects, research centers of excellence, researcher posts and research training (the graduate school system) on a competitive basis. Its Japanese counterpart in many aspects is the Japan Society for the Promotion of Science. Tekes funds challenging R&D projects carried out by business enterprises, research institutes and universities. Sitra is an independent organization subordinate to the Parliament. Sitra funds research and training, innovative projects, business development and corporate funding according to thematic programs. (Minedu 2006b)

The Finnish and Japanese systems use different means to reach an effective combination of basic expenditure and competitive resource allocations. Research funding subject to national competition plays a central role in external funding. The Academy of Finland is a part of the administrative sector of the Ministry of Education. For the universities, the Academy of Finland and Tekes have a key role with their role of evaluating the level and status of basic research. The Academy of Finland is a central research administrator and it is a major source of funds for university research. The Academy is divided into four research councils, each responsible for financing research within their disciplines.

University funding in Finland for the year 2005 covered actual core funding (89.4%), financing of national tasks (1.5%), financing of national programmes (4.7%), project funding (1.9%) and performance-based funding (2.4%). The Ministry of Education and the universities hold annual performance negotiation in which the common objectives of the universities and the Ministry are agreed. The purpose of the negotiations is also to agree on the objectives and resources related to each university's tasks and core fields. The objectives set in these negotiations are based on the Development plan for education and research approved by the Government. Performance evaluation focuses on the quality and impact of research and education.

The purpose of actual core funding is to ensure each university its specific readiness to carry out its duties. Core funding consists of four elements: the extent factor (correction factor for higher costs in some regions), education, research and societal services. There are differences between different fields in graduate education and, therefore, their expenses per student can vary. This is why the system has been constructed so that five different classes are utilised each with their own cost coefficients that determine the resources to be provided by the state. The coefficient for the first class is 1.25 and it comprises Humanities, Economics, Law, Theology, Health sciences and Social sciences. These fields traditionally arrange much of their teaching with lectures that do not require special equipment or other support functions that would increase the expenses. The coefficient for the second class is 1.5 and it comprises education, sport sciences and psychology. The higher expense associated with this class is especially due to the high costs in teaching and research facilities.

The coefficient for the third class is 1.75 and it comprises technology, natural sciences and forestry-agriculture. These fields have many laboratories and their research equipment leads to higher rates of expenditure than the first two classes. The coefficient for the fourth class is 3.25 and it comprises pharmacy, veterinary sciences, dentistry and medicine. The teaching groups in this class are small and the laboratory and support services they require are expensive. The coefficients in the fifth class vary from 3.75 for fine arts and art & design to 4.5 for music and to 5.5 for theatre and dance. (Minedu 2004a, 10-11).

The performance management of universities means that the administrative and academic management is responsible for the accountability of a university. In past years many Finnish universities failed to achieve their performance objectives and this has meant a decline in resources, resulting in budget cuts even during the middle of budget periods. To a university, discontinuities of this kind are situations where a change in strategy is unavoidable. With strategies universities can support their own actions to increase their economic latitude. At the same time, universities can reduce their dependency on the state budget.

In Finland the Ministry of Education's productivity programme for 2005-2008 is guiding universities and polytechnics towards sharpening their strategies (MinEdu 2005). It is a document that defines how universities and polytechnics should improve their operations. It contains concrete objectives and timetables for their achievement.

"The decision on spending limits for central government finances for 2007–2011 confirmed the effect that productivity-improving measures will have on reducing the need for personnel throughout central government and in each administrative branch by 2011. The aim is for the labor force requirement in 2011 to be, in all, 9,645 person work years fewer than at present. The reduction would be about 8 per cent of the present personnel and would mean on average that more than a third of the jobs vacated by natural attrition would remain unfilled. The reduction in the need for personnel made possible by an improvement in productivity has been taken into account in the budget proposal to the extent that the effects of the productivity projects concern 2007. As a result of the measures to improve productivity the number of state employees will fall by a total of 1,100 person work years from 2006 to 2007."

Budget review 2007, 15, Government of Finland

The productivity programme of the Ministry of education sets goals for core functions and support services alike. Productivity ratio as total benefits / total costs is not sufficient because it is qualitative and multidimensional rather than reducible in character. Demands of productivity programme are challenging to higher education institutes in Finland, and they look for a close

co-operation. In Finnish university sector there are several proposals made to merger Universities or develop their closer co-operation and partnerships. Structural development projects are carried out for example between Helsinki University of Technology, University of Art and Design and Helsinki School of Economics and Business Administration has agreed to deepen cooperation "New university in the field of technology, business studies and art design" as a goal. The overall aim is to establish a new international top-level university of research and education in Finland. It is quite challenging to establish an international top-level university by administrative decision. Also University of Turku and Turku School of Economics and Business Administration has agreed to develop a consortium model between these universities. Universities of Joensuu and Kuopio have agreed in their turn to found "University of Eastern Finland".

The results of expert planning groups for these structural developments were published in February 2007. In spring 2007 it seems these structural development projects will be carried out by January 2009. Next years will give evidence these initiatives are glitch or a change for the Government. There are also several other initiatives for deepening of co-operation between universities and also between universities and polytechnics. Two polytechnics and two universities in Tampere, for example, have plans a closer co-operation and partnerships in teaching and research.

Government Program 2007 promises more resources for higher education sector in Finland, as the reality is more diverse. The background for this was the development of the structure and operation of polytechnic education based on the Government's decision-in-principle. According to the Government decision on structural development in public-funded research system (7.4.2005) the resources for higher education institutions would be directed into larger entities. Furthermore, the steering of higher education institutions will emphasize the qualitative aspects of research and education as well as internationalization. Due to the high number of universities of applied sciences the Government points out that sufficiently large unit sizes should be formed and the regional responsibility of universities of applied sciences carry out. The Government plans mean a reduction in the number of student entries and their release for redistribution under new conditions. The Ministry of Education and the universities of applied sciences agreed in the performance negotiations for 2006 that for the period 2007-2008 the number of student entries at each polytechnic will be 10% less than for the previous year.

The reduction in student entries will hit cultural subjects the severest, especially the numbers of new students for communication and music as well as tourism and catering should be reduced by 2008. Two universities of applied sciences operating primarily within these fields have now decided on a merger, which took effect in the beginning of year 2007. Haaga and Helia were universities of applied sciences maintained by private licence holders and they share many common areas of operation. The objective of the merger has been to provide a higher education institution closely cooperating with business life and having an international grip. The benefits from the merger to students are expected to be seen in an expansion of the scope of education as well as the possibility for a greater focus on internationalization. The fields of education in the new Haaga-Helia University of applied sciences are business, hotel, restaurant and tourism management, information technology, journalism, management assistant training, sports management and vocational teacher education. Similar merger projects are carried out between two capital area universities of applied sciences Stadia and EVTEK as well as between two universities of applied sciences Svenska Yrkeshögskolan and Sydväst Polytechnic offering instruction in Swedish language.

The productivity programme presupposes also that higher education institutions bring their strategies up to date and concentrate on their core tasks. The starting point for universities is a focusing strategy (see. Ramsin & al. 1984; Paavola & Aarrevaara 1993) and having units which are sufficiently large. To compose strategy for a university is challenging if the management of university is weak and the academic disciplines are strong.

A typical strategy for higher education institutions to respond Government's productivity program is to make more efficient use of declining resources. This means that while the extent of the resources is reduced, the existing tasks will still be carried out, such as providing the same amounts of teaching and research output at a lower unit cost. In this situation, productivity must increase in relation to the declining resources in order to keep the quality of work at the same level. Quality levels can be intentionally lowered, for instance by teaching just what is imperative or by lowering the requirement levels so that even weaker student performance will ensure that the number of degree completions promised to the Ministry in the performance agreement will be reached.

Another strategic alternative is focusing. In this case, some of the services could be abandoned, for instance, by leaving out some of the secondary subject alternatives or courses from the curriculum, or by pruning "unnecessary" research. This will be a de-motivating strategy for researchers, because it will jeopardize merits of academic staff in terms of Massy (1996).

The Finnish universities' status as state accounting offices is problematic because their ability to react to strategic challenges is weak. Universities' interest in cutting programmes, faculties or

support services is weak because of the obvious academic interest in internal decision making. In Japan, setting up new unctions often leads to financial cuts in other functions of the university. Morikazu Ushiogi (2006) has described the process behind the setting-up of a graduate school within the National University structure. The Ministry of Education approves new establishment only if the university sacrifices teaching positions from other graduate schools in order to set up a new graduate school. MEXT would not increase the number of teachers, and steering universities towards the practice of scrutinizing critically their existing teaching positions. This policy cuts the endless growth of universities and gives them a reason to focus on the most advantageous areas.

Table 1: Funding from State Sources in Finnish universities. Amount and growth among the operation 1995-2006 (source KOTA 2007).

	1995	2000	2006	Change %
Budgetary funding and building investments for universities (MEUR)	764	1016	1317	72.4
Students	134872	157041	176555	30.9
Masters degrees conferred	9819	11515	13128	33.7
Doctors degrees conferred	765	1156	1409	84.2

A third alternative is narrowing, whereby unprofitable regional teaching can be reduced. For instance, libraries can purchase fewer books and reduce the number of newspaper and magazine subscriptions. Still, enhancing productivity in teaching is a crucial question for universities. Budget funding for universities including building investments has increased by 72.4% in 1995-2006. Simultaneously, the number of all students in universities has grown by 30.9%; the number of examinations taken has increased by 33.7% at the Masters level and by 84.2% at the doctoral level. There is a risk for delicate dilemma, which refers to accept too many graduate students. If it is not possible for graduates to find scarce academic jobs, it will lead to professional failure (Kawashima & Maruyama 1993, 337). This phenomenon is discussed as well in Japan as in Finland. The number of university teaching staff in Finland has increased slowly over the last ten years, despite the rapid expansion in graduate studies, which has led to fewer lectures being given, fewer classes being delivered in regional areas and more participants in lectures.



Illustration: Increasing of personnel and degrees in Finnish Universities 1993-2006. Source: KOTA, MinEdu 2007.

The increase in numbers of general staff has been discussed during the 1990s and 2000s. Critics from the teachers' trade unions say first of all, that the focus should be on teaching positions, which should be increased to ensure the quality of higher education studies. The opposite opinion suggests a clear improvement in productivity of teaching due to improved teaching infrastructure, new support services and significant investments for ICT in educational use. It has grown in parallel to the rising interest in self-regulation and self-regulated learning. The rapid development of the ICT has made it possible to develop highly sophisticated Technology-Enhanced Learning Environments, TELEs (Steffens 2006, 353). Virtual Universities as a part of University structures serve this function, although the experience of the benefits of virtual university has so far been varying.

It is unlikely that the current level of productivity and higher education's increasing role in the innovation system would never have been achieved by increasing the number of teaching posts. Co-operation between educational programs and higher education institutions, and also reforms in education require management, administration and financial planning rather than teaching capacity. A division of labour between the professions is needed to improve productivity.

A fourth strategic alternative is redirecting, which means that some functions can be discontinued in order for new ones to start. The personnel's use of time can be shifted from teaching towards research or vice versa.

Finnish universities have chosen a range of strategies or combinations of strategies in discontinuity situations but different emphases can also be found at the different implementation levels of the adaptation process. Universities' autonomy can create unpredictable problems. For instance, a university may have to aim at more efficient use of declining resources in its operations while faculties and departments react according to the focusing or narrowing strategy. It is also possible that the strategies of different units or profit centres might be in conflict with each other: the aims of one Faculty to reduce secondary subjects can mean difficulties for another Faculty's attempts to intensify its operations.

The chosen strategies can also produce surprising side effects, and short-term focusing can lead to long-term ineffectiveness due to, for instance, the decline in the levels of dedication of key personnel. Universities' units also have the option of redirecting their operations in order to gain supplementary funding. In this case practical actions might include extending economically profitable operations, product development or the expansion of profitable operations.

Evaluation as a tool for governance

European Qualifications Framework (EQF) as an European Union initiative means that expertise targets are set for degrees according to a set of eight reference levels. The learning outcomes aiming to describe what a learner knows, understands and is able to do regardless of the system where a particular qualification was acquired. The EQF differs from the traditional approach with learning inputs such as length of studies or type of institution being recognized as a basis for studies. The EQF encompasses general and adult education, vocational education and training, as well as higher education (EU EQF, 5th Sep. 2006).

The EQF pays attention to learners', not institutions', needs. From this point of view it differs from Japanese demands for the "course-oriented" view and systematic curricula in Masters Courses (see. MEXT 2005, 18). The EQF will definitely reduce study durations in higher education and will enhance non-traditional and mature age enrolment in higher education. Study undertaken within the EQF is described through the European Credit Transfer and Accumulation System (ECTS) points system. This system enables flexibility with respect to expertise gained during different periods and in different ways.

Although the whole higher education sector in Finland is now using the ECTS system, dimensioning has not yet allowed for a significant increase of flexibility between the two strands of higher education institutions. There are still problems in transferring between institutions and between higher education sectors. Different educational paths are not yet common although the conditions for multiform education have improved. The dimensioning of higher education studies is still very much institution-specific even though studies have been dimensioned using study weeks or points (credits) since the early 1980s. The application of the ECTS system may take much longer to fully implement than was expected in the Ministry of Education's plans.

The Japanese Government's demand in "A Vision for the Future of Higher Education in Japan" (MEXT 2005, 11) was for a flexible higher education system that anyone could easily access, and to establish smooth connections between higher education institutions. The key means for this development in both Japanese and Finnish higher education system is based on the assessment of quality. In Japan, due to universal access to higher education, the funding for universities is not based on results such as the number of graduations. In Finland, the performance system in place between universities and the Ministry of Education is based on the number of graduations, and this leads to differences between Japan and Finland in terms of demands for quality assurance. However, quality assurance has led to increased transparency and accountability in teaching and learning. As Futao Huang has stated, by 2004 all national universities in Japan had implemented self-monitoring and self-evaluation systems and had published the results. Also, the proportion of third-party evaluation has increased from approximately 61% in 1998 to 93% in 2003, but the improvement of educational quality still leaves much to be desired (Huang 2006, 354).

Evaluating quality is an important component in the formation of the European Higher Education Area (EHEA), and it is an important area of university development in the 21st century. Just as universities evaluate their students, governments must exercise the oversight of universities on behalf of the general public. According to Guy Neave (2004, 11-12) evaluation takes place in two classic models: system control and change. These dimensions have formed deep conflicts in the ongoing quality assurance in Europe. On the one hand there is a shifting from external control and regulation to greater responsibility by universities for their own quality control. On the other hand, striving for transparency and mutual recognition will bring about more directives imposed on universities from above. It is difficult to reach accountability and quality enhancement simultaneously within the same evaluation process (OECD 2006b, 47).

Universities and universities of applied sciences publish their annual reports and accounting statements, but the comparable information is collected by the institutions and is published in the KOTA (universities) and AMKOTA-databases (universities of applied sciences). The KOTA database provides the basic material for the evaluation of universities, and this can be used for both evaluating the operation of the whole university system and within universities as part of performance management. Although the KOTA is a database maintained by the Ministry of

281

Education, its creation has enabled the transfer of the main responsibility for evaluation from the Ministry to the universities. The strategy of the Ministry of Education based on control and planning changed in the early 1990s, if not earlier, into universities exercising self-control, in which the academic community provides the essential information needed for the evaluation process. (Hölttä & Aarrevaara 2004, 4-5)

In Finland, institutions have been the subjects of evaluation. The basis for evaluation has come from university evaluations where research, teaching, or administration are evaluated for the whole university. For the implementation of evaluations, FINHEEC was founded in 1995. It does not operate directly under the Ministry but it is a separate public organisation funded by the Ministry of Education. It is an independent expert body in nature and it assists universities, universities of applied sciences and the Ministry of Education in matters relating to evaluation. The initiative for evaluation has been varied. The first valuations were initiated by the higher education institutions themselves or were jointly initiated with the Ministry of Education and FINHEEC agreed on an evaluation schedule with those universities that had not yet been evaluated (Smedby & Stensaker 1999, 6-7). Later the evaluation program of FINHEEC has become praxis.

A special feature in Finnish evaluation is that evaluations serve primarily as policy instruments rather than as tools for direct influence and control. In this sense, the Finnish system is different from the accreditation system. The FINHEEC evaluations do not include the element of sanctions, which means, for instance, that licences for providing education are not revoked because of a poor evaluation outcome, and evaluations do not directly affect resources. The goal of university evaluations is improvement. All the higher education institutions are to be evaluated by the year 2010 in order to meet the short-time targets set by the EU Ministers' communiqué in Berlin, in September 2003.

The Finnish system is an example of a government taking an initiative in proposing mechanisms to carry out an unfulfilled statutory requirement for evaluation. It is also an example of sensitivity to university autonomy and well-being (Kells 1992, 135).

Academic professions narrowing role

The academic work may be understood as the responsibility over certain tasks, autonomy over one's work. Those working in academic professions are often not required to report to others on their progress. This concept of academic work suits a culture which emphasises results, in which the organisational control is not focused on how the work is done but on the results achieved. It is possible to work very independently in many different kinds of tasks, which means that work itself does not define the degree of autonomy in academic work. This picture of academic work seems to change in the 2000's. As Kogan and Teichler (2007, 13-14) have noticed, the gradual loss of professional autonomy and pressure for external societal expectations and increasing control of performance is evident in academic work globally.

In 2006, Finnish universities employed about 30 700 persons, about 8400 of them teachers, 6300 research staff, 1750 graduate school students and about 14200 other staff (KOTA 2007). Professors are required to be highly qualified by research, teaching skills and in most cases, a doctoral degree. In most systems Professor refers to senior academic chair holders, as Professorship has different content in different higher education systems. The number of professors in Finnish universities 2006 was 2268. The student-teacher ratio in universities was 22:1, and 2.7 new students are annually admitted per teacher. There are 1.6 Master's degrees awarded per teacher and 0.6 doctorates per professor annually. In 2006, the overall polytechnic workforce was about 10650, of who about 5900 were full-time teaching personnel and about 4750 other personnel including administration and support services (AMKOTA 2007).

The trend in support services is to split them off from core services of research, teaching and social impact. In state administration the consolidation of financial and personnel management in education sector into a single service centre has been prepared so that the new, centralized institution could be founded during 2007. Expert organizations, including universities, have the need to focus on their core expertise.

Teaching staff at Finnish universities is more diverse than the list of academic ranks presented in the table 2. For example, there is also an Adjunct Professor rank (Docent), which is a senior lecturer post without a permanent position in the university. Nor does the table show researcher positions or full-time graduate school students, as they are not formally academic staff members. The number of full-time untenured teachers in 2006 was 200 of which the female proportion was 59.5% (KOTA 2007). The table 2 clearly shows women's under-representation at senior academic ranks, but their representation is higher in teaching areas, such as lecturer and assistant posts. The under-representation of women in senior academic ranks has been reported in several countries. For example, in Australia the general pattern over time has been very similar to the Finnish pattern; women are under-represented at all levels except 'below lecturer' (Dobson 2006, 76-77).

	Japan	proportion of women %	Finland	proportion of women %
Professors	66125	10.6	2268	23.4
Senior assistants, assistant professors	38855	17.7	693	36.7
Lectures	20731	25.2	2667	51.6
Assistants	37373	25.2	1135	51.6

Table 2: Teaching posts of department staff in Japanese universities and junior colleges in 2006 and Finnish universities in 2006. (Sources: MEXT 2007 and KOTA 2007)

Atsunori Yamanoi (2006) reports that foreigners and women female academic staff members are small minorities of the Japanese academic markets, and the logic of "the higher, the fewer" works also in Japan. Some attempts to change the situation have carried out by MEXT, which provides no strong leadership but rather provides recommendations on about the recruitment of female academics. The Science Council of Japan (SCJ) and the Japan Association for National Universities (JANU) as buffer organizations have adopted different policies from those of MEXT. SCJ has proposed to the Japanese government a new gender policy for universities and research institutes, and suggested a target of 10% increasing of female academics members by 2010. JANU, in turn, has recommended an action plan for National Universities to increase the proportion of female academics to 20%. It has also established a review committee to review gender policy in the National Universities. (Yamanoi 2006, 66-70).

In Finland's previous system of higher education, the content of work was governed by the teaching load of each teacher. Even today the curriculum is sometimes very rigid, and implementation requires strong co-ordination at the university department level. The universities have adopted a system within which teaching staff are expected to work 1,600 hours annually, but the allocation of these hours per day or per week is not specified (annual work time). The annual work time system covers all university teachers and most polytechnic teachers. It may be said that the adoption of the annual work time system clarified the role of teachers in higher education. The annual work time system is a fairly broad interpretation of the use of the working hours, but it does provide a concrete tool for performance discussions during annual reviews between supervisor and teacher. These discussions can be used to agree on the shares of teaching, evaluation, and research and general use of working hours. (see Aarrevaara 2005)

The Finnish system has had a long tradition of collective bargaining in public organizations, since it was developed in the 1980s. A recent step is a new salary system adopted to be used in universities from 2005. The key element of the new system was the evaluation of all posts and the

people occupying them. University teachers and other personnel have separate criteria which are used in performance review meetings between individual staff members and their supervisors. The salary paid is a combination of the job's requirements and the performance of the individual staff member (Aarrevaara, Stenvall & Saarelainen 2005). The Finnish tradition of collective bargaining can be seen in the active role played by trade unions and their participation in final decisions about each individual salary proposed by foremen at departmental level. This is an exception to common practices, since the Finnish system is based on high delegation in human resources management. According to the OECD report on Performance-related Pay Policies this is opposite to the situation in Japan, which is rather a low delegation country (OECD 2005, 37).

In the current salary system which was introduced in Finnish universities in 2005, the aim is to use salary payment as a tool for performance management, and the departments prepare, agree and implement policy goals within a framework and guidelines handed down by the government. The Result-based Reward system (RBR) encourages employees to use profit unit goals to generate the overall result. The point of view for personal evaluation varies from the university level to lower levels, such as the department, individual projects or teams, or combinations of these. (OECD 2005, 105-107)

Implementing the salary reform takes as much time as any other major reform, because university staff is under too much pressure from administrative reform (Aarrevaara et. al. 2005). The new salary system will increase inequality among university staff. A critical argument in discussion is that if the salary is based on personal results, academic staff will not be interested in sharing their research results with their colleagues.

Another and more positive angle to RBR emphasises, that the new salary system and performance review meetings have opened a new perspective to develop work in the university and many issues are which were not previously addressed between managers and experts are discussed. A new salary-system will be more effective as participants learn to use it as a management tool.

The academic ranking system is a challenge to reform in the university sector, not only from the equality point of view. Due to the low number of vacant posts, the external mobility of permanent university teachers in Finland is very low. Low mobility concerns also international recruitment as well as the national mobility of young university teachers and researchers. Few professorial posts become available each year for senior researchers, and for young researchers there is lack of incentive to move between institutions. The OECD thematic report (OECD 2006b, 27) has

suggested that PhD graduates should not immediately seek employment at the same institution until they have spent some time elsewhere. This rule is part of the academic tradition in some countries, especially in the USA.

5. Challenges for Finnish higher education

Most member states of the European Union are facing the problem of industries moving their production to countries with lower production costs. In particular, the Nordic welfare states have heavy cost structures that increase the price of work to high levels. That is why basic industries have moved in great numbers to countries with lower labour costs within Europe and in Asia. Finnish companies have also moved their production to countries such as China, the Baltic States and Russia. Finland has faced challenges on competitiveness and has answered to them by improving the profitability of industry, services and public administration. According to the addendum to the 2007 state budget of Finland, research, innovation, product development and high levels of expertise are the means for Finland to promote the global competitiveness of the country. Raising the level of education is a key to ensuring the availability of a capable work force in Finland. To achieve this objective, the extensive network of higher education institutions now enjoys wide political support. However, universities and universities of applied sciences should find the strategic core areas in which they have the highest competitiveness.

A particular problem for Finland is the high percentage of the age groups born between 1945 and 1949. The average age of retirement is 63 years which means that an accelerating flow of workforce retirements is starting. This phenomenon and the strong structural changes in society have led to many important fields suffering from labour shortages. The 2007 state budget also contains proposals for action to extend workers' time in the labour force and to provide integration training for immigrants. From the point of universities these challenges imply responsibilities that fall on adult education and the internationalisation of universities. The aim is to improve the quality and efficiency of higher education by reducing the number of higher education institutions. The pressures on the Finnish higher education system are clear but the possible models of solutions are contradictory.

With a strong Finnish commitment to the establishment of the EHEA the system has to create functioning compatibility for the European level. The dual sector system is presently in use in e.g. Germany, the Netherlands, and Austria. In Portugal the higher education system is composed by public and private universities and polytechnic institutes (Belmiro 2006, 254-255). Sweden and Great Britain, for instance, have changed over to a uniform university system as some higher

education institutions offer more professionally oriented higher education and some are more academic. The Finnish Government has committed to dual model based on discrete degrees, degree titles and functions, as the division of responsibility universities and universities of applied sciences will be clarified (Govt 2007).

The dual sector system in Finland has strong political support and the system appears to be effective from the national point of view. Internationally speaking, the dual system poses problems. Transfer to the uniform EHEA and the easily comprehensible degree structures associated with it does not sit well with a complex dual system. The relevance of first cycle university degrees to initial employment is still minor but university of applied sciences (polytechnic) degrees have a higher level of direct relevance to the labour market. Finnish universities have reported that employers are not keen to hire students with only a university Bachelor's degree. In addition, the academic drift phenomenon is leading to uniform practices. In Finland this means that universities of applied sciences are adopting many of universities' practices, and therefore bringing the systems closer to each other. For example, the OECD thematic review of tertiary education (2006c, 16) recommends that higher education should work with the professional and trade associations to identify occupations in which university Bachelor degree qualifications would be likely to provide skills and capabilities suitable as the entry level to the work force.

In Finland, higher education degrees have been based on the ideas around the duration of studies. Over the past 25 years, degrees have been measured in study weeks (credits) and by the target duration to complete a degree programme. The system has been inflexible and transferring between universities and universities of applied sciences has been slow. Within the EHEA especially within the EU, the revitalized idea of degrees is based on gathering actual expected qualifications into degrees.

Finland has adopted a development model for the assessment of quality according to which quality assurance is verified separately for each university. This is well suited to a higher education system which is based on the traditional continental and state control model (see Maassen 2003, 42-43). The European Association for Quality Assurance in Higher Education (ENQA) is able to produce the means for institutions to improve their overall quality, and they have provided the possibility for a common set of European tools to be developed. Another alternative would be the accreditation model. There are pressures to adopt this model in Eastern Europe, but also in Finland in some specific fields of study, such as business studies and technology.

287

Inflexible official structures and the strong legislative foundation of the organisation restrict Finnish universities' capacity to make rapid changes. The heavy cost structure weakens the opportunity to act in response to the market or to take financial risks. The setting up of the EHEA requires improved competitiveness by the universities in that they have to compete for students and researchers. Increasing economic autonomy is necessary for Finnish universities to enable them to maintain their current levels of operation in the changing environment.

With increasing global competition for students, the pressures to adopt a more certified set of evaluation and accreditation practices are also increasing. The present practice has been based on cooperation between states, and in this the main responsibility for active development has been with the Ministries of Education. If the development of the EHEA will continue after the Bologna process to a higher degree between universities than governments, it is possible that accreditation practices common in the United States will increase in Europe too. This situation cannot be assessed until we know whether European integration in the field of higher education will continue to increase after 2010.

With quality assessment in higher education institutions, the third cycle of doctoral degrees can also be included in the uniform higher education area, as was put forward as part of the Berlin 2003 Communiqué. As one short-term target, all signatory countries should have adopted a two-cycle system of degrees by 2005, have automatically issued the Diploma Supplement in a major language to all their graduates free of charge, and have made a start on introducing a quality assurance system. The third, i.e. the doctoral cycle will henceforth be covered by the Bologna reforms promoting, closer links between the EHEA and the European research area (Carneiro & Steffens 2006, 346). Expectations are high for the inclusion of the third cycle degrees as a part of the EHEA after London 2007 meeting of Ministers of Education (Communiqué 2007).

The Finnish higher education network is large, consisting about 50 higher education institutions. An OECD thematic review group (2006c, 70) has suggested the redefinition of both universities of applied sciences and universities as "legal entities". The report suggests that the main alternatives for a new model of governance should be based on the non-profit corporation model or the foundation model. Higher education institutions as "legal entities" would assume significant devolved responsibility from government over a range of domains such as investment, property or share-buying. These proposals have been responded by a committee, which recommends universities to form a new type of a legal person under public law. This proposal would separate universities judicially from the state (MinEdu 2007). The non-profit corporations or foundations would hold the licences for universities and universities of applied sciences in the future.

The proposal by the OECD would also mean that the strong municipal ownership of the polytechnic sector should be dissolved, but the extensive political will which would be required to do this does not yet exist. Traditionally, Finland has been able to carry out reforms quickly if necessary, and there are proposals being prepared within the university sector to organise more extensive economic and functional autonomy.

The establishment of the uniform EHEA will also mean the integration of national higher education systems. In Finland, Europeanisation means primarily the diminishing of state control and a shift towards market control. So far Europeanization has been more internationalization than globalization, since it is related to the integration of systems or academic co-operation and mobility (Teichler 2004, 6-7). Alongside academic profession the role of stakeholders may be emphasised in the new system.

Major reforms in the Finnish higher education system are, however, still ahead. Like many European countries, Finland has inflexible higher education structures leading to the problem of governance systems that have remained fairly unchanged for decades. This has led to an increase in bureaucratic administration and has caused a permanent deficiency in financing. The Government has set goals for the Finnish higher education system, to improve the quality of operations and impact, and to strengthen internationalisation.

In the long term, higher education will end up in a situation in which efficiency will become the competitive factor at both national and institutional levels. Changing circumstances mean that the principles on which organisations rest no longer work as intended. The yardstick of efficiency is generally the cost of producing a service, whether it is a core or a support service.

The structural redevelopment of higher education institutions in Finland is in progress and cooperation has increased rapidly over the past few years. This is manifested in common education projects between universities and universities of applied sciences as well as closer regional cooperation. Finnish universities and universities of applied sciences are also rapidly internationalising and their readiness to respond to international competition has increased throughout the 2000s.

In August 2005, an act amending the University Act came into force making it possible for universities to set up their own or joint "university companies" and to use the profit for their own purposes. The aim of university companies is first of all to fulfil their social impact in society. Contribution to local and regional development is a fundamental mission for majority of public universities, and from this point of view the mission is similar in Japan and Finland.

It is unlikely that Finland will build up a university corporate system like the one introduced in Japan in 2004. Finnish government favours structural development as well as increasing of public and private funding for universities for years 2007-2011. It will, for example, allow experimental collection of tuition fees from students outside the EU/ETA-area. The idea for this trial is to use resource to cover internationalisation expenses of individual Master's programmes, and the trial will include a scholarship programme for low-income foreign students (Govt 2007, 5.3). The Government is committed to increase core funding for universities, as with the conditions for functional and structural reforms. Besides increasing of general university funding, Government will also increase donations for scientific research and make them widely tax deductible (Govt 2007, 3.4). The conditions for structural and financial changes to rectify the deficiency in funding are there when political decision-making is ready to take the step.

References

- Aarrevaara, T. –Stenvall, J. Saarelainen, T. (2005): Performance Review Meetings and Academic Disciplines. Paper presented in CHER-conference 2005.
- Aarrevaara, Timo (2005): Managing Experts in Higher Education. Presentation in IMHE Conference on Trends in the management of human resources in Higher Education. Workshop Staff development & Remuneration systems.
- Aarrevaara, Timo Kivistö, Jussi (2006): Ohjausteoriat käytännössä: Tietoteollisuuden lisätoimenideohjelman toimeenpanoprosessi. (Implement theories and practice: How the programme for increasing education in the information industry fields was carried out. In: Mika meita ohjaa. eds. Aarrevaara, T. & Herranen, J. In Finnish.)
- Ahola, Sakari (1997): 'Different but Equal' Student Expectations and the Finnish Dual Higher Education Policy. European Journal of Education. Vol 32, No. 3.
- AMKOTA. AMK-sector database maintained by the Ministry of Education, Finland.
- Arima, Akito (2003): The Future of Higher Education in Japan. The Third Annual Michio Nagai Memorial Lecture. UNU Public Lectures.
- Arimoto, Akira (2006): Viewpoints of the Trow- and knowledge-models from an international comparative study of higher education. Higher education research in Japan Vol. 3, Fe. 2006.
- Belmiro, Gil C. (2006): Higher Education I Portugal: Recent Evolution, Trends and Perspectives of Future. The Journal of Finance and Management in Colleges and Universities 3 2006.
- Brewer, Dominic Gates, Susan Golman, Charles (2002): In pursuit of prestige Strategy and competition in U.S. higher education. Transaction Publishers.
- Carneiro, Roberto Steffens, Karl (2006): Editorial in European Journal of Education, Vo. 41, Nos 3-4, 2006.
- Clark, Burton R. (1983): The Higher Education System Academic Organization in Cross-National Perspective. University of California Press.
- Communiqué 2007. London Communiqué. Towards the European Higher Education Area: responding to

challenges in a globalized world. Meeting of Ministers of Education, London 2007.

- Cummings, William (2006): Globalization and knowledge production: An Asian tilt? Higher education forum vol. 3, March 2006. RIHE.
- Dobson, Ian (2006): Broken Down by Sex and Age: Australian University Staffing Patterns 1994-2003. Higher Education Management and Policy Vol. 18, No.1.
- Geiger, Roger L. (1986): Private Sector in Higher Education. Structure, Function and Change in Eight Countries. Ann Arbor. The University of Michigan Press.
- Goldfinch, Shaun: Examining the National University Corporation Plan and University Reform Plan in Japan. The Journal of Finance and Management in Colleges and Universities 1:2004. Center for National University Finance and Management.
- Govt 2007. Government programme of Prime Minister Matti Vanhanen's second cabinet. Government statement to Parliament on the programme of Prime Minister Matti Vanhanen's second cabinet appointed on 19 April 2007
- Hemmings, Philip Turner, David Parviainen, Seija (2003): Enhancing the effectiveness of public spending in Finland. OECD, Economics Department Working fs No. 358. EKO/WKP 2003:12.
- Horie, Miki: The Internationalization of Higher education in Japan in the 1990's: Reconsideration. Higher Education The international journal of higher education and educational planning. Vol. 43, 1:2002.
- Huang, Futao: Assuring and Enhancing Educational Quality in Universities. Higher Education Policy. Vol. 19, No. 3, September 2006.
- Hölttä Seppo Malkki, Pertti: Response of Finnish higher education institutions to the national information society programme. Higher Education Policy 13, 2000.
- Hölttä, Seppo Aarrevaara, Timo (2004, eds.): Arviointi ja laatu korkeakouluissa (Assessment and Quality in Higher Education Institutes, in Finish). University of Tampere, Department of Administrative Science B11, 2004.
- Kawashima, Tatsuo Maruyama, Fumihiro (1993): The education of Advanced Students in Japan Engineering, Physics, Economics and History. In: Clark, B. (ed.): The Research Foundations of Graduate Education. Germany, Britain, France, United States, Japan. University of California Press.
- Kells, Herb R. (1992): Self-Regulation in Higher Education. A Multi-National Perspective on Collaborative Systems of Quality Assurance and Control. Jessica Kingsley Publishers.
- Kinnunen, Helvi (2006): Spending rules bring stability to fiscal policy in Finland. Bank of Finland Bulletin 3:2006.
- KKA 2006. PhD Training and the Knowledge-Based Society An Evaluation of Doctoral Education in Finland. KKA 1:2006.
- Kogan, Maurice (2002): National Characteristics and Policy Idiosyncrasies. In: Higher Education in a Globalizing World. Kluwer Academic Publishers.
- Kogan, Maurice Teichler, Ulrich: Key challenges to the academic profession and its interface with management some introductory thoughts. In: Kogan & Teichler (eds.): Key challenges to the academic profession. Unesco-forum on higher education, research and knowledge. INHER-Kassel. Werkstattberichte.
- KOTA. Statistical data on Universities and fields of education. Maintained by Ministry of Education, Finland.
- Maassen, Peter (2003): Shifts in Governance Arrangements. An Interpretation of the Introduction of New Management Structures in Higher Education. In: A. Amaral et. Al. (eds.): The Higher Education Managerial Revolution? Kluwer Academic Publishers.

Massy, William F. (1996): Resource Allocation in Higher Education. The University of Michigan Press.

MEXT 2005: A Vision for the Future of Higher Education in Japan. MEXT Jan. 28 2005. Report of the Central

Council for Education.

- MEXT 2006a. White Paper on Education, Culture, Sports, Science and Technology 2005. Educational Reform and Enhancement of the Educational Functions of Communities and Families. Ministry of Education, Culture, Sports, Science and Technology (MEXT), Japan.
- MEXT 2006b: Statistical abstract Education, culture, sports, science and technology. Ministry of Education, Culture, Sports, Science and Technology, Japan 2006.
- MEXT 2007: Statistical abstract Education, culture, sports, science and technology. Ministry of Education, Culture, Sports, Science and Technology, Japan 2007.
- MinEdu 2001. Management by Results in Higher Education. The Ministry of Education, Publications of the Department for Education and Science 2001:84
- MinEdu 2004a. Education and Research 2003-2008. Development plan. Ministry of Education.
- MinEdu 2004b. Management and Steering of Higher Education in Finland. Publications of the Ministry of Education, Finland. 2004:20. Department for Education and Science Policy.
- MinEdu 2005. The Ministry of Education's productivity programme for 2005-2010 (In Finnish). Ministry of ducation Publications 32:2005.
- Minedu 2006a. Universities 2005, Annual report. Ministry of Education Publications 2006:31.
- MinEdu 2006b. Research in Finland 2006. Published by The Committee of Public Information.
- MinEdu 2007. Yliopistojen taloudellisen ja hallinnollisen aseman uudistaminen, loppuraportti. (Two-man committee report on the financial and administrative status of universities, in Finnish). Reports of the Ministry of Education 2:2007.
- MoF 2006a: Ministry of Finance. The Budget Review 2007.
- MoF 2006b: Handbook on Performance Management. Ministry of Finance. Public Management Department, Governance and Accountability 2:2006.
- Neave, Guy (2004): The Bologna Process and the Evaluative State A Viticultral Parable. In: Unesco Forum ccasional Paper Series. Paper No. 7. Managerialism and Evaluation in Higher Education.
- OECD 2005. Performance-related Pay Policies for Government Employees. OECD 2005.
- OECD 2006a: Thematic Review of Tertiary Education. Country Background report of Japan. Higher Education Bureau. Ministry of Education, Culture, Sports, Science and Technology. March 2006.
- OECD 2006c: Thematic Review of Tertiary Education. Finland Country Note by John Davies, Thomas Weko, Lillemor Kim and Erik Thulstrup. September 2006.
- Paavola, Vesa Aarrevaara, Timo: Leikkaus ilman nukutusta. Studies of the Management Information Center of the City of Helsinki 12:1993.
- Ramsin, Håkan Rundqvist, Hans Stevrin, Peter (1984): Strategisk management inom den offentliga sektorn. Liber Förlag.
- Scott, Peter (2005): The global dimension: internationalizing higher education. In: Kehm, B. M. -De Wit H., eds. Internationalization in Higher Education: European Responses to the Global Perspective. European Association for International Education, 2005.
- Smedby, Jens-Christian Stensaker, Bjorn (1999): National quality assessment systems in the Nordic countries: Developing a balance between external and internal needs. Higher Education Policy 12.
- Steffens, Karl: Self-Regulated Learning in Technology-Enhanced Learning Environments: Lessons of a European peer review. European Journal of Education, Vol. 41, Nos. 3-4, 2006.
- Teichler, Ulrich (2004): The changing debate on internationalization of higher education. Higher education vol. 48.

- Trow, Martin A. (1999): From Mass Higher Education to Universal Access: The American Advantage. Minerva 37. Kluwedr Academic Publishers.
- Ushiogi, Morikazu (2006): Daigakusasei eno gutaizou (How to Revitalize Japanese Higher Education. In Japanese.) Toushindou.
- Välimaa, Jussi (2004): Nationalisation, localization and globalization in Finnish higher education. Higher Education. Vol. 48 27-54, 2004.
- Yamamoto, Kiyoshi (2004): Corporatization of National Universities in Japan: Revolution for Governance or Rhetoric for Downsizing. Financial Accountability and Management. Vol. 20.
- Yamamoto, Kiyoshi (2006): Performance of Semi-Autonomous Public Bodies: Linkage Between Autonomy and Performance in Japanese Agencies. Public Administration and Development 26. John Wiley & Sons, Ltd.
- Yamanoi, Atsunori (2006): The historical and political context of gender policy in Japanese higher education. From inter- and intra-national perspectives of the frameworks of gender policy. In: Gender inequity in academic profession and higher education access: Japan, the United Kingdom and the United States. COE Publication Series No. 22. Research Institute for Higher Education. Hiroshima University, September 2006.