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Progressing external engagement

A re-evaluation of the third role
of the University of Turku

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Preface

The higher education scene is in a state of constant change. The trends and developments in the demographics and in the labour market, the emergence of global educational markets and the creation of the European Higher Education Area, based on the Bologna process, all place increasing pressure on the quality of education and research and thus on the national competitiveness. The Ministry of Education's draft development plan on education and research for the coming five-year period stresses that more attention be paid especially to the regional engagement and the quality assurance mechanisms in higher education.

Responding to regional needs and external engagement have always been at least partly the 'invisible' tasks of all universities and polytechnics. Knowledge, research, and new innovations have proven to be the success factors in Finland's strategy for international competitiveness. At the same time, the universities have moved more strongly into the focus of interest of the society at large. The proposed new University Law emphasises the so-called Third Role of universities: the universities are expected to co-operate with their various stakeholders and promote technology transfer and innovations in all their fields.

The changes in the operational environment and the new obligations bring forward a number of new challenges for the universities in Finland. The University of Turku has been active in promoting this role, as it already in 1999 chose to focus on its relationships with the surrounding environment in the institutional evaluation conducted by FINHEEC (FINHEEC's Report 3:2000). This new follow-up evaluation examines what has since happened in the university and how it has responded to these challenges. Transforming a multidisciplinary university also into a regional actor is not a straightforward task; however, multidisciplinary may also provide additional new possibilities. The process demands information on new operational models and mechanisms. On the other hand, all universities have to constantly take care of the quality of their other basic tasks: academic research and teaching based on research. An important question is how to implement the three assigned tasks so that they also support each other in a balanced manner.

The Peer Review Team led by Professor John Goddard has covered the subject very thoroughly and has thus given its entire expertise to the use of the university, and, in fact, to all Finnish universities. Our hope is that the observations and recommendations made by the Team will provide the University of Turku additional tools in developing its own interface with its environment. We wish to thank the Peer Review Team and the Chair for their meritorious work.

Helsinki 17.11.2003

Ossi V. Lindqvist
Chairman, FINHEEC

Tapio Huttula
Secretary General, FINHEEC

Contents

The Peer Review Team	6
1 The Context of the Re-evaluation	8
Introduction	8
Recent Development in Finnish Higher Education Policy and Science and Technology Policy	9
Conduct of the Evaluation	11
The Structure of the Report	13
2 Relations with the External Environment	14
Defining the Region	14
Higher Education Institutions as Economic Actors in South West Finland	15
Turku University as a Source of Human Capital	16
Towards Greater Responsiveness	17
Turku Science Park: Building Regional Cluster Strategies	18
Conclusions	20
3 Strategic Direction and Academic Leadership	21
Turku University in the National Context	21
The Role of the Rectorate	23
The Role and the Administration of the Faculties	24
Creating Financial Headroom	25
Estate Management	26
Conclusion	27
4 The Role of Research, Research Services and Doctoral Training	28
Research Council	28
Research and Industrial Services RISO	29
Overhead Recovery	29
Doctoral Training	30
5 The Role of Teaching and Learning including Adult Education	31
Teaching and Learning Council	31
Management of Student Affairs	32
Adult Education	33

6	Administration and Management	34
	Introduction	34
	Human Resources Management	34
	Progress from Administration to Management	35
7	Conclusions and Summary of Recommendations	36
	Summary of Recommendations	37

Appendices

1:	Responses to the recommendation of the first evaluation presented by Rector Keijo Virtanen	41
2:	Major events and achievements in terms of the University of Turku's external impact, 2002–2003 presented by Rector Keijo Virtanen	47
3:	Co-Operation between the City of Turku and the Universities in Turku	49
4:	Responses to the recommendations of the first evaluation based on the report of the working group of adult education, May 2003 presented by Kari Seppälä, Director of the Centre for Extension Studies	56

The Peer Review Team

Chair

Professor Dr. **John Goddard**, Professor of Regional Development Studies and Deputy Vice-Chancellor of University of Newcastle upon Tyne, U.K. He chaired the review of the external impact of Turku University in 2000. He was a member of the Peer Review Team which conducted the 1998 evaluation of the regional role of Eastern Finland Universities and subsequently chaired the Peer Review of their re-evaluation in 2003. He led the OECD Institutional Management in Higher Education programme study on “The Response of Higher Education Institutions to Regional Needs” published in 1999.

Members

Professor Dr. **Ulrich Teichler**, Director of the Centre for Research on Higher Education and Work of the University of Kassel. He was a member in the review of the external engagement of Turku University in 2000. He was Chairman of the Consortium of Higher Education Researchers from 1992 to 1998 and President of EAIR from 1997 to 2001. He was a member of the team evaluating the University of Jyväskylä in 1993 and member of the OECD expert team reviewing Finnish higher education policy in 1994.

Professor Dr. **Ilkka Virtanen**, Professor of Operations Research and Management Science and Dean of the Faculty of Technology of University of Vaasa. He was a team member in the review of the external engagement of University of Turku in 2000. He was a member of the Peer Review Team which conducted the 1998 evaluation and the 2003 re-evaluation of the regional role of Eastern Finland Universities. In 2003 he was a team member in the review of the study programmes in Business Administration and Management of the Estonian Business Schools and Faculties. He chairs the Accreditation Board of Professional Courses, a subsection of Finnish Higher Education Evaluation Council FINHEEC.

Dr. **Peter West**, head of the administration of the University of Strathclyde, in Glasgow, Scotland since 1990. Strathclyde has an international reputation for innovative approaches to University management, and he was invited to lead a seminar on the evaluation of administration organised by FINHEEC in 1998. He was President of OECD’s higher education management programme, IMHE in 2000–2002. In 1996, he was awarded an honorary doctorate by the University of Rostov on Don, for his work in assisting the modernisation of the Russian universities. In 2002, he received an honorary doctorate from the University of Malawi for his work to support and develop the university.

Secretariat

Jaana Puukka, MA, MSSc, coordinator of the evaluation of external impact of Turku University in 1998–2000 and the author of the university's self-evaluation report has since been employed as Public Relations and Liaison Manager of the University of Turku and Director of PR, Marketing and Communications of Turku Polytechnic. She is currently in charge of the enhancement of the external engagement of Turku Polytechnic and acts as a consultant of the Ministry of Education for the review of masters' programmes with funding from the EU structural funds.

Finnish Higher Education Council (in attendance)

Anna-Maija Liuhanen, M.Sc.(Econ.), Senior Adviser at the Finnish Higher Education Evaluation Council since 1996, responsible for the coordination of university sector evaluations. Member of the steering group of the European Network for Quality Assurance in Higher Education ENQA. Earlier Development Manager at the University of Oulu, and coordinator of one of the national pilot institutional evaluations at the University in 1992–1993.

I

The Context of the Re-evaluation

Introduction

The thematic re-evaluation of the University of Turku concentrates on the external impact of the university and follows up a similar exercise undertaken in 1998–2000. The institutional re-evaluation is designed to assess progress since the initial review and draws upon Turku University's own assessment of its activities.

Institutional management was a strong theme in the initial review of Turku University. Our last report was predicated on the assumption that institutional adjustment is a necessary pre-requisite for an effective response to external challenges. Recently, both the Ministry of Education and the Science and Technology Policy Council have emphasised the third role of universities and its interlinkage with institutional management. We are, however, conscious that within the higher education scene there is considerable debate about whether strengthened institutional management is a necessary pre-requisite for effective external engagement.

We recognise that the aim of strengthening the external relationships of the university can generate “ambivalent” reactions from the academic community. There are at least four reasons for this: (a) The difficulty of steering a middle course between the Scylla of pursuit of knowledge of its own sake and the Charybdis of an instrumental and innovation-endangering subordination to external expectations. (b) A concern that quality is sacrificed in the name of ‘relevance’. (c) Some academics consider strengthening external relationships as serving external expectations while others consider the university's work primarily as challenging the existing views of society (critical function). (d) Disciplines differ as regards their relationships to society. Some see hardly any links and some might see links but are not highly appreciated by society in the current ‘Zeitgeist’.

We make these observations at the start of this report because we are not convinced that, following the initial review, the University of Turku has fully debated and come to an agreed position on the issues surrounding external engagement. Indeed “ambivalence” towards the third role still remains a key characteristic of the University.

Recent Development in Finnish Higher Education Policy and Science and Technology Policy

The third role of universities has recently gained new impetus in the Finnish higher education scene. One of the objectives of the new financing model for universities (to be applied from the year 2004 onwards) is to support the strengthening of their social and regional impact. Furthermore, in the new Universities Act the third role will be introduced as a clear task for the universities.

The Ministry of Education has highlighted the new responsibility in its own strategy. According to the recently published report describing the Ministry of Education's regional development strategy for 2003-2013, "*Attention will especially be paid to a regionally balanced population structure and to the promotion of knowledge in the regions*".

The challenge of the universities' third role is also highlighted in a review entitled *Knowledge, Innovation and Internationalisation* by the Science and Technology Policy Council of Finland:

The burning question in today's debate is how to include the duty to promote the utilisation of new knowledge in the Universities Act as the university's third mission. This question arises from both the growing expectations directed at universities by the users and from the legislative issues involved in efforts to reconcile the university's administrative culture, business and research ethics. The need to address these questions is tangible, because the change taking place in universities' mission and funding structure is systematic, shaking up the institution to its core.

Science and Technology Policy Council, 2003 (p.19)

Despite the new developments there is still a conflict of interest between the basic functions of the university and the new third mission. On the one hand, universities are encouraged to promote research-based entrepreneurship. On the other hand, any substantial allocation of funds and/or resources in terms of working hours remains problematic. If the universities and their staff are to play a full part in the regional development, then the many ambiguities that inhibit entrepreneurial activity by the universities must be removed. We therefore fully endorse the views of the Science and Technology Policy Council:

Universities must have the possibility and capability for organising their economy and administration in a way which will enable their actual operations to develop flexibly. ... Success can be seen in the capacity of the university to create dynamic operational environments.

Science and Technology Policy Council, 2003 (p. 37)

The complex interplay between the development of the university and evolving national policy makes this evaluation particularly challenging. Turku University has established its national and international position in research and teaching. At the same time it is being challenged to be an active player in its environment.

These challenges are summarised in the following statement from the Rector of Turku University, prepared at the request of the PRT, in part as a response to the challenges raised by the Science and Technology Council report quoted above and of which he was a co-signatory.

“The report asks how the university as an institution will be able to manage the pressures and growing expectations. Here at Turku University we are experiencing every day these growing demands. It would be fine if we would receive more funds accordingly. It also would be fine if we could discontinue some not-so-important activities. This is not easy because of the historical burden (“that and that discipline has always been here”). The new University Law which should become effective in 2005 favours clearly the entrepreneurial aspect, or the third task of the universities – even too much from a comprehensive university’s – like Turku University – point of view. There are some good suggestions (like permitting the universities to act as shareholders, and to manage funds which are not directly in the university budget, etc.).

Having said this the University of Turku, has other duties than the third task alone. Internationalisation, together with the high quality of research and teaching, is crucial for our external impact also in our own region.

Consequently the long term basic/core funding must form the basis for creating dynamic operational environments. If there could be some improvement in the future the University itself as well as the Rector and others should have courage to channel those funds innovatively – and not automatically based on “historical reality”. However this requires greater autonomy for the University. The Finnish Universities’ Rectors’ Council has for some time requested more economic autonomy for the universities. and there are some fairly modest steps toward that goal in the new University Law draft.”

This statement clearly echoes the ambivalence towards the third role with which we opened this chapter. It stems, in large measures, from the lack of un-earmarked funds available to the University to pursue this task.

Conduct of the Evaluation

The Peer Review Team (PRT), which consisted of the same members as the earlier PRT with exception of Professor Ingrid Moses, was established early 2002. Professor John Goddard the Chair of the PRT, visited Turku University in May 2002 when a route map and procedures for the self-evaluation were agreed with the university senior management. In October a further follow-up meeting was held in Helsinki between the Rector, Professor John Goddard and Professor Ilkka Virtanen.

It was agreed that the self-evaluation report should include a review of recommendations of the earlier PRT report and a summary statement indicating recommendations rejected, progress to date on recommendations accepted, future implementation timetable and barriers to implementation. It was also agreed that the self-evaluation process should include internal and external stakeholder mapping. The final draft of the self-evaluation report was to be submitted to stakeholders for written comments to be included in the revised draft.

In June 2003 the draft of the institutional self-evaluation report was provided to the PRT and Ms Anna-Maija Liuhanen who participated in the follow-up evaluation as FINHEEC's observer. The PRT discussed the draft report via teleconference in mid-June. All members agreed that the report was not very substantial and did not clearly respond to the earlier recommendations. Moreover it did not follow the procedures agreed between the chair of the PRT and the university senior management. On the basis of the feedback from the PRT Turku University provided a further, more detailed version of the self-evaluation report about a week before the site visit.

The two-day site visit of the PRT was held in Turku in August 2003. On arrival the PRT received more detailed information from the Rector with a whole set of new responses. The Rector's presentation included a list of the main accomplishments regarding the recommendations of the previous PRT and principle achievements of the university in the past two years. These are reproduced as Appendices 1 and 2 to this report. The PRT received presentations on research and research services as well as teaching, learning and continuing education which provided valuable insights that supplemented the written report. We met the Vice Rector for Research, the Vice Rector for Estate Management, Technical Services and Information Technology, the Head of Administration, the Head of Human Resources and the Head of Finance. We met the Deans and some of the faculty administrators as well as the Teaching and Learning Council and the Research Council. There was not enough time to meet

various stakeholder groups. Instead, a reception was organised with a good cross section of the community including academics, students and external stakeholders and from which we received valuable feedback.

In the initial review of the year 2000 the PRT sought to establish an institutional learning process by presenting a list of recommendations and priorities for action.

Unfortunately, contrary to the expectations of the PRT the university did not engage in a process of SWOT analysis to build on strengths, address weaknesses, counter threats and exploit opportunities. We were not made aware of any university-wide dissemination of information and best practices gathered in the initial self-evaluation and PRT review. Nor was the self-evaluation report circulated amongst external stakeholders. In short, the ownership of the process of follow-up to the initial evaluation does appear to have been limited. Having said this we acknowledge that the follow-up took place only two years after the first evaluation. This is a very short time for carrying out deeper organisational and cultural changes in the university. Because this work is still continuing it could be argued that it was a little premature to expect the university to prepare a detailed follow up. Nevertheless as a point of general principle *we strongly recommend that institutional evaluations and re-evaluations are systematically co-ordinated by FINHEEC and that a steering group with representation from FINHEEC is in place to guarantee senior management engagement. We further recommend that the follow up self-evaluation report should include quantitative information on the performance of the university (as presented in chapter 2 of this PRT report), a revised SWOT analysis and a response to each of the recommendations made in the initial review.*

In making this recommendation we are not suggesting that the university is necessarily expected to comply with the recommendations but rather reflect upon them. We recognise that some recommendations may not be accepted for good reasons, others may be in the process of implementation and still others inhibited by resource or external policy constraints. The re-evaluation report should indicate how the university has engaged in this process of reflection.

The Structure of the Report

In the next chapter we set the scene for the evaluation by describing the region of South West Finland. We highlight Turku University's direct impacts on the region and the progress made in responding to the needs of the region and in linking the region to the global body of science in Turku Science Park.

Chapter Three considers the strategic direction and the academic leadership including the role of the faculties in creating a more responsive university. Chapter Four focuses on the progress made in research and research services while Chapter Five has a focus on teaching and learning. Chapter Six considers the capacity of the University administration and management to support the external interface. In the final chapter we provide a list of recommendations for the university on its way forward towards greater external engagement.

We would wish to end this introductory chapter by entering two caveats to our analysis. First, we recognise in dividing the contents of our report in this way that the important connections between teaching, research and administration in relation to external engagement may be overlooked. The third role is after all delivered through teaching and research and administration plays a supporting role. Second, any review inevitably represents a snapshot of an evolving process of institutional development and some issues will have been progressed further than others. These caveats should be borne in mind in reading the following chapters.

2

Relations with the External Environment

Defining the Region

The Region of Southwest Finland, with a total population of 451,000, is the second most important economic area in Finland. It consists of 56 municipalities which comprise five sub-regions: Turku, Salo, Loimaa, Vakka-Suomi and archipelago sub-region Turunmaa. The sub-regions differ from one another in terms of their economic structure and natural environment and are divided into an agricultural zone, an industrial and service zone, and an archipelago zone.

Measured by the gross value of production, Southwest Finland ranks second in Finland. In 2002 its share of the total gross national product was 9.5% and the economic growth of the region was faster than the national average. A key factor behind the region's economic growth is the electronics industry. During the past ten years the value of its output in the region has increased more than tenfold while the growth of other industries has been in the order of 15%. As a result the share of output accounted for by manufacturing is higher (over 40%) than the national average (25% of the GNP).

Economic growth has been concentrated within the central cities, Turku and Salo. It is strongest in Salo, the home of Nokia, where the GNP per capita is the highest in the country. Around 25% of the production of the region is generated in the Salo area 60% is Turku. In the Turku area, the service sector is clearly more significant than industrial production. The per capita service sector production in the Turku region ranks the third in the country.

The share of the public sector in the region is distinctly smaller than the national average; the same applies to trade, construction, agriculture and forestry, as well as financing and insurance, whereas, the shares of transport and storage services, data communication and business services are about the national average.

In the period from 1996 to 2000, employment in manufacturing increased by more than 16%. The electronics industry increased employment by more than 24%. Basic metals and metal products (plus 33%), minerals (plus 25%), chemicals (plus 24%) and vehicles (plus 24%) exhibited even higher rates of increase.

In the past ten years, manufacturing's share of the working population has remained unchanged whereas the share of agriculture and forestry, and finance

and insurance have decreased. Within manufacturing there has been a marked decrease in the employment in the textile, clothing, leather and shoe sectors (minus 58%), building materials (minus 46%) and food (minus 32%). The growth of employment in electronics has however compensated for the decrease in these sectors.

Higher Education Institutions as Economic Actors in South West Finland

In Turku, there are three independent universities, the biggest polytechnic in Finland, subsidiaries of three networked polytechnics and several lower level education units and institutions. In terms of research institutions, there are public research institutions such as the Finnish Game and Fisheries Research Institute, hospital and health care related research institutions, private research labs, and the recently established biotechnology research group of the Technical Research Centre in Finland (VTT) for pharmaceutical development.

Table 1 shows, that the universities in Turku and Turku Polytechnic form together a higher education sector with 4,900 staff number and over 33,000 students. The higher education institutions are therefore major employers in Turku, and the staff and student expenditure on local services is significant. In the regional scene the role of the University of Turku is undisputed: With its 15,000 students and 2,700 staff members Turku University is a key player.

Table 1. Higher Education Institutions in Turku – basic economic data (Source: KOTA and AMKOTA databases, Ministry of Education)

The year 2002	University of Turku	Turku School of Bus. & Econ.	Åbo Akademi University	Turku Polytechnic
<i>Total staff (in HTV)</i>	2711	314	1184	702
<i>Total number of students</i>	15 261	2184	6834	8823
<i>Total funding (1000 €)</i>	151 222	18 438	68 787	56 000
Budget funding				
(State Funding, 1000 €)	98 490	11 252	42 388	
<i>External funding:</i> (1000 €)	52 732	7186	26 399	
Finnish Academy	13 201	868	4895	
TEKES	6045	47	3443	
Finnish companies	4493	1089	3657	
Other Finnish sources	23 764	3589	12 204	
EU	3789	1312	1222	
Foreign companies	708	32	198	
Other foreign sources	732	249	780	

Turku University as a Source of Human Capital

Turku University plays a significant role in developing human capital in South West Finland by recruiting students from the region and providing qualified labour to local employers. In the past four years, Turku University's regional recruitment base has remained relatively stable, about half of the new students coming from the province of South West Finland. For example in 2002 Turku University recruited 51% of all the new bachelor's and master's level students from South West Finland. The second largest intake, 10%, was from the Uusimaa Province, i.e. Helsinki and surroundings. The share of the adjacent province of Satakunta has decreased from 12% in 1998 to 9% in 2002.¹ For all the students registered in Turku University at the end of the year 2002, the majority of students were from South West Finland and Satakunta (70%). The next largest groups came from Uusimaa, (10%), and Pirkanmaa and Häme, i.e. Tampere and surroundings, (7%).²

Table 2. Home origin of new bachelor's and master's level students

	1998	2000	2002
South West Finland	52	46	51
Uusimaa	9	11	10
Satakunta	12	11	9
Pirkanmaa and Häme	11	12	10
Other provinces	16	20	19
	100	100	100

Source: University of Turku: Student Services

A similar picture is revealed in respect of graduate placements (Table 3). According to the survey on the first destinations of graduates of 2001 more than half of the respondents (52%) lived in South West Finland in summer 2002; and 74% of them in the City of Turku. Regional employment was highest among the graduates of the Faculty of Mathematics and Natural Sciences – partly because of the university's research positions in biosciences and medicine, whereas 39% of the graduates of the Faculty of Law had found employment in Uusimaa and surroundings. 65% of those with employment were engaged in public sector employment whereas 27% had found employment in the private, and 7% in the third sector.³

¹ The University of Turku 2002, Student Services.

² The University of Turku 2002, Career Services.

³ The University of Turku 2002, Career Services.

Table 3. The first destinations of graduates of 1999–2001 (% age of all graduates)

Graduates in 1999–2001	1999	2000	2001
South West Finland (%)	50.4	48.9	51.7
Uusimaa (%)	23.9	26.9	25.7
Pirkanmaa and Häme	7.7	6.7	7.6
Satakunta	8.7	6.9	6.8
Other provinces	9.3	10.6	8.2
	100	100	100

Source: University of Turku: Career Services

In the national comparison, Turku University records a level of regional graduate placement above the average. At the end of 2001, 56% of Turku University's graduates from the academic years 1997–2001 lived in South West Finland. Apart from the universities in Helsinki, only the graduates of Oulu University demonstrated as high a level of regional placement as the graduates of Turku University. (cf. Tampere 48%, Jyväskylä 35%, Joensuu 30%).⁴ We can therefore conclude that Turku University plays a significant role in the labour market for higher level skills in South West Finland.

Finally we note that 17% of the population in Turku are students. An average student who graduates with a master's degree in 6.5 years spends about two years working during his/her student years. Students are mainly employed in health care and service sector positions. With their income they also support small local retail businesses and services.

Towards Greater Responsiveness

There is clear evidence from the last few years that the links between the University and its environment have improved.

The university's authorisation to award MSc degrees in Technology is clearly a great step towards strengthening the region's important electronic manufacturing base. We welcome the cooperation in ICT field between the university and the polytechnic in providing an MSc programme in computer science in Salo as a new model of co-operation in higher education. We further commend the decision to build a common ICT house for the universities and Turku Polytechnic in the heart of Turku Science Park.

We welcome the progress made in Satakunta and particularly commend the introduction of professional retraining to qualify nurses as physicians. By organising the clinical part of their training in Satakunta, Turku University is developing a regional medical school thereby linking future doctors to the health needs of the region.

⁴ Statistics Finland.

We also welcome the remarkable progress made in research cooperation, for example the long-term international research contracts in bone research with Schering, and in PET imaging with Amersham; the establishment of the Technical Research Centre of Finland VTT biotechnology in Turku; the cooperation agreement on biotechnology with the Russian Academy of the Sciences; and the long-term research contract with the Finnish Parliament. Through the successful research cooperation the university is linking the region with the global body of science and making the region more attractive for inward investments. In summary, *we commend the University for the progress that it has made in establishing new academic programmes in key areas relevant to the economic development of South West Finland.*

The Rector is perceived as an excellent ambassador, and the university's brand is a rising one. Turku University has become a significant player in the creation of regional cluster strategies. Not only has it contributed to the development of the plans, it is also committed to their implementation. There is much closer collaboration with the City of Turku and a joint strategy for regional cooperation has been drafted between all higher education institutions in Turku (see Appendix 3 for the summary provided by the City of Turku). Notwithstanding the significant progress that has been made in deepening the regional links of the areas that were already actively engaged in our previous review, the more difficult task of transforming the academic heartland of the University remains. The academic areas that were actively engaged with the region were similar to those identified in our earlier review. Large areas of the Humanities and Social Sciences would appear not to have taken external engagement on board.

Despite the enhanced university-environment interface, Turku University has not assumed a leadership role in technology transfer, commercialisation of research results or generation of new businesses. According to the current Rectorate the financial stringency of budget funds and the limitations in the usage of funding inhibits the realisation of such aspirations. The third strand organisation is therefore not built within the university but it is instead channelled externally through Turku Science Park.

Turku Science Park: Building Regional Cluster Strategies

The university plays an active role in regional cooperation in high tech fields, with the aim to create an attractive innovation environment. As a result of joint planning by the City of Turku and the universities the core competences of the various partners were brought together in Turku Science Park. It forms a chain of high tech know-how ranging from basic and applied research to production and marketing in the ICT and bio sectors. The aim is to exploit the multidisciplinary competence of the higher education institutions in order to gain a competitive advantage.

Turku Science Park is a 5 km² area, favourably located in the vicinity of the city centre. It covers the historical centre of Turku, three universities, university hospital, polytechnic, and other educational institutions and the various high tech companies working together to create added value in Biotech and ICT. There are altogether ca 30,000 students, 400 professors and 330 high tech and service organisations.

Turku Science Park Ltd is a regional development company acting as a neutral broker initiating and facilitating cooperation and executing its own business. It is responsible for the strategic, infrastructure and business development, marketing and promotion, finance and international networks. Turku Science Park Ltd has a 60 million euro balance sheet with 45% equity and a balanced revenue flow of ca. 9 million euros (47% from facility leases, 30% from development projects and 23% from services). The City of Turku is the majority shareholder with 90% while Turku Energy has 6% of shares. The remaining 4% is divided between private companies (33%), real estate companies (21%), neighbouring cities and communities (27%) and university foundations (19%). Turku Science Park Ltd has a board with the Rector of Turku University as a member.

The two fully owned daughter companies Turku Biovalley Ltd and ICT Turku Ltd were founded to conduct network development, cluster analysis, incubator and facility services and development projects. They implement the Centres of Expertise programme funded by the Ministry of Interior and provide an interface with biotech and ICT companies. They carry the responsibility for cluster development with universities, polytechnics, other public actors and enterprises. The special research units of the universities cooperate with the daughter companies in order to provide core facilities, equipment and services to university researchers and companies. The third regional area of expertise is materials research, for which the Science Park parent company is still responsible. A company called TopAnalytica Oy has been founded to provide equipment services, and the university is involved in its administration.

In summary, we commend the progress made in developing a regional high-tech cluster strategy within Turku Science Park which is based on the joint efforts of the City of Turku, regional development authorities, higher education institutions, and businesses.

Although the University has not assumed a broader leadership role in the region building it has clearly become more responsive to the region particularly in the bio-sciences sector. Moreover much more work is needed to open up the more academically orientated ICT departments of the universities to fulfil the potential of ICT, for example in bio-informatics and multimedia.

Conclusions

The university senior management is undoubtedly in favour of the enhancement of the university's external engagement. This is clearly reflected in the mandate of the evaluation of 2000. Nevertheless, the university leaders are aware of the ambiguities of such a policy and they are still somewhat cautious in pursuing it. The PRT did not see strong commitment to drive the agenda of external engagement *throughout* the University. The Rector's main concern is quite properly for the core functions of the University: his considerable personal efforts in external engagement could be interpreted as being designed to protect the traditional functions so that the academic heartland is left undisturbed except for those areas which are already active. *We therefore recommend that much more effort is devoted to carrying the high level message of external engagement to all of the faculties and departments.*

3

Strategic Direction and Academic Leadership

Turku University in the National Context

In the national scene Turku University competes successfully with the other second tier universities of Tampere, Oulu and Jyväskylä. Table 4 shows, that these universities each form a higher education sector in their regions with between 2000 and 3000 staff and 14,000–15,000 students. Nationally Turku University ranks third after Helsinki and Oulu in terms of absolute levels of funding as well as student and staff numbers. Nevertheless, it is Helsinki University that dominates the Finnish higher education scene with its 38,000 students, 7200 staff and total funding of 440 million euros. (Table 4)

Table 4. Leading Universities in Finland – basic economic data

The year 2002	Turku	Tampere	Oulu	Jyväskylä	Helsinki
Total staff (in HTV)	2711	2054	2957	2200	7178
Total number of students	15 261	14 813	15 346	14 150	37 685
Total funding (1000 €)	151 222	112 877	172 068	130 301	440 056
Budget funding (State Funding, 1000 €)	98 490	74 763	116 294	82 552	270 327

Source: KOTA database, Ministry of Education

Table 5. External funding profile of leading Finish Universities 2002

The year 2002	Turku	Tampere	Oulu	Jyväskylä	Helsinki
External funding (1000 €)	53 732	38 114	55 774	47 749	169 729
External as a ratio of state funding	0.65	0.66	0.68	0.63	0.61
Finnish Academy	25.0	19.4	19.0	16.8	22.1
TEKES	11.5	5.9	15.0	5.5	6.6
Finnish companies	8.5	7.2	15.5	8.0	16.2
Other Finnish sources	45.1	43.7	34.5	51.1	44.9
EU	7.2	7.5	11.5	18.1	6.5
Foreign companies	1.3	14.8	0.7	-	0.5
Other foreign sources	1.4	1.5	2.8	0.3	3.0

Source: KOTA database, Ministry of Education

In terms of the funding profile, Turku is marginally less dependent on the core state budget than Tampere and Oulu but fall significantly behind Helsinki (Table 5). In relative terms it does better in funding from the Finnish Academy (25.0% of its external budgets). Whilst in terms of funding from Finnish companies it falls way behind Helsinki (8.5% of external funding compared to 16.2% for Helsinki). In view of this it does surprisingly well in winning TEKES funding, where it is second to Oulu.

Turku University's research volume has increased significantly over recent years. According to the self-evaluation report this is shown by a growth in the proportion of total funding accounted for by external sources (33.4% in 1999 and 34.9% in 2002). In the national context Turku University's share of external funding and its expansion, however, shows only moderate growth (Table 6). It can be argued that the national average is attributed to the technical universities with high levels of external funding. Still, the most striking feature is the progress made by Helsinki University: With its 3.8 per cent increase it clearly exceeds the national average. This remarkable growth may – at least partly – be attributed to the institutional adjustment and management changes within the university and/or political decisions favouring the “national” university. Whatever the explanation the figures, admittedly covering a short time period, suggest that Turku is slipping further behind Helsinki in the national league table of universities.

Table 6. External funding of leading universities 1999 and 2002 (% total funding)

University	1999	2002	Growth in percentages
Oulu	32.0	32.4	0.4
Turku	33.4	34.9	1.5
Tampere	33.5	33.8	0.3
Average	34.8	36.5	1.7
Jyväskylä	34.7	36.6	1.9
Helsinki	34.7	38.6	3.8

Source: KOTA database, Ministry of Education

The Role of the Rectorate

Institutional performance is in part attributable to its academic leadership. What is the capacity within the Turku rectorate to perform this leadership role?

Since the initial review in 2000 the academic leadership of the university has been strengthened. There are now three Vice Rectors, one for research and research services, one for teaching and learning, and one for estate management, technical services and information technology. *We commend the university for taking up part of our recommendation and appointing a third Vice Rector but regret that the Vice Rector's area of responsibility is limited to physical resources and does not cover the vital areas of financial and human resources.* It was also unclear to us what are the decision making powers of the Vice Rectors.

In the initial review we identified a weakness in the position of the rectorate. The Vice Rectors were not appointed on a fulltime basis and although the rectorate was involved in complex change management, it was not adequately supported. While the Rector's Office has been strengthened by the appointment of new administrators, there is still no executive back-up structure to directly support the rectorate in its leadership role. Furthermore a potential succession problem is likely to emerge with the election of the new Rectorate since there is no evidence of succession planning to transfer the tacit knowledge of the present team. *We therefore restate our recommendations from 2001 namely that to carry out its multiple tasks the rectorate needs support distinct from the largely internal administration role of the Rector's Office. We also recommend that consideration is given to the enlargement of the third Vice Rector's area of responsibility to cover financial and human resources and that the decision making powers of the Vice Rectors are clarified.*

In a significant development we note that the "resources" Vice Rector has been elected as full time Chancellor of the University. This provides both a threat and an opportunity for the senior management. On the one hand the Chancellor could relieve the Rector of some of his external responsibilities to allow him to spend more time on the internal restructuring of the University. On the other hand there is a danger of role confusion. *We therefore recommend that serious consideration should be given to the division of labour between the Chancellor and the Rector in terms of external engagement.*

One of our principal concerns in the 2000 review was the link between the Rectorate and the Faculties via the Deans. We had no real evidence of how well this was working but were assured by the Rector that he had regular informal meetings with the Deans to discuss matters of policy and day to day operation. However this meeting was not part of the formal governance structure of the University and as we indicate below, it is not clear how effectively messages are communicated by the Deans to the "front line" of academic departments.

The Role and the Administration of the Faculties

Following extensive discussion, the PRT is of the majority view that efficient academic leadership and management at the faculty and departmental level as well as by the Rectorate is a necessary pre-condition of effective external engagement.

We have concerns about structure in relation to the links between the central management and the Faculties. Our original recommendation was for the roles and responsibilities of the Faculty Offices to be clarified and for consideration to be given to the staff having a dual responsibility to the Dean and the Head of Administration. The University has responded by transferring the Faculty Offices wholly to the Deans and by enhancing the role of the Faculties in both financial affairs and human resources.

We are concerned, in general, that the benefits of the new arrangements, in terms of a better link between Deans and Faculty Offices, have been bought at too high a price in terms of a loss of central co-ordination. It is evident to us that there are large variations in terms of management capacity within and between the faculties. We heard of inconsistencies of practice between Faculties, in the absence of any common organisation templates. One Faculty had exceeded its staffing budget without any central restriction being imposed. In some Faculties efficient management is difficult when there are a number of small departments with only one or two Professors. One Dean had been unable to make progress with a review of small departments, because of lack of support from the Centre. We heard evidence that the position of students is difficult in such small departments, to the extent that students may refrain from making complaints in the fear of being marked down. Faculty Councils (which are the formal decision making fora) are in some cases not fully representative of departments, let alone from their Heads. We were told that this structure is based on the university law and it means that every governance board must be composed of one third of professors, one third other staff and one third students. In consequence every department head could not be a member of the faculty council. Whilst we understand this constraint it should not prevent the establishment of a management group in each Faculty composed of all Heads of Departments which makes recommendations to the Council.

Most worrying of all is the evidence that because of dislocation between the Centre and the Faculties, the key message of external engagement may not be reaching the academic heartland in the Departments. While there is good practice in some departments we found no evidence of a systematic attempt to make sure that mechanisms of external engagement that are working become part of institutional procedures.

If the vision of a more externally engaged university is to be realised, *we recommend that a review of the structure of faculties and departments should be carried out without any further delay.* The regrouping of departments to bigger

and more manageable units should receive full support from the centre. A particular high priority would be in the Faculty of Social Sciences.

We recommend that the University review again the structural links between the Rector's office at the Centre of the University and the Faculty offices, including the governance/management/academic structures that these offices support. We further recommend the Rector's Office takes closer interest in faculty governance and management and provide a model of good practice and guidelines and principles to guarantee efficient operation (including a template on how often faculty and department governance and management groups should meet, agenda, membership of committees etc.)

Creating Financial Headroom

As we noted in our quotation from the Rector, in the current budgetary system there is only limited room for releasing funds to invest in initiatives that can generate external impact. In Turku University, 90% of budget funding goes on salaries and premises. The special funding stream for the third strand activities (5%) is largely earmarked. In 2004 an additional 20 million euros will be allocated to Finnish universities. However, the real addition is only 3,7 million euros with the remainder committed to increase rental for premises (As we understand it this is largely absorbed by Helsinki University and other Helsinki area universities because of the higher capital city rentals it has to pay to the state holding company (Senate Properties) which owns all university premises. This would seem to be a highly regressive form of regional policy.)

The PRT cannot see how the universities can be expected to be fully engaged in the third role activities in the present funding system. Nevertheless, we believe that Turku University has not fully understood how financial headroom can be created within the constraints of the current funding regime and how external engagement can be used as a means to grow its business.

The allocation of resources within the University is the key area of management decision making for the Faculties. We had recommended that the University 'undertook a review of how it models and accounts for its internal flow of funds'. The University has responded by setting up a system of advanced budgeting and moving to devolve premises costs. Nevertheless, we were told that the core allocations are still based on historical precedent, without any dynamic elements to reward and incentivise academic departments to carry out the University's strategies. For example, the overhead money, 5–6 million euros annually, is not separated from the main stream budget funds. We also heard that in the absence of efficient cost control faculties were going over budget because of salary costs. In short, there is little evidence of strategic financial management taking place within the university.

A key challenge in any resource allocation model is how to support cross-cutting initiatives championed by university-wide bodies like the Research Council and Teaching Council. In our initial review we recommended that both Councils were not resource allocation bodies and we note in the next chapter that this has created questions about the role of the Research Council. However, we argue that a funding model which identifies research and teaching funding streams linked to specific outcome targets identified by the Councils could make these more effective bodies.

We recommend the university sets up as a matter of urgency a proper cost control system and a resource allocation model which includes incentives for income generation from external sources. We recommend that the Resources Council, when established, addresses internal resource allocation modelling as a matter of urgency.

Estate Management

Constantly rising rents are a source of much concern for the Finnish universities. Turku University is one of the largest real estate holders in Turku. Its premises position the University in a favourable site in the city centre which facilitates co-operation and has helped, for example, the science park development. Three universities, the central university hospital, a student village and the science park are all within a walking distance. *We recommend the university takes a full advantage of its favourable location and initiates enhanced cooperation with the City of Turku and other higher education institutions in the campus in the form of sharing infrastructure and services and undertaking joint marketing efforts with the goal of creating financial headroom and building an image of Turku as the second major higher education concentration in Finland.*

Since 1995, the majority of Turku University's space has been rented from Senate Properties on long term agreements. As Senate Properties is expected to make an annual profit of 7% the universities are faced with constantly rising market-priced rents. For example between 1999 and 2002 Turku University's space grew by less than 5% while its rents increased by nearly 30%. Currently 17% of the University total expenditure is spent on premises. As the university is forced to rely increasingly on external income, the way in which its infrastructure and premises is financed and maintained is becoming a major issue. To alleviate the problem of constantly rising rents, the University is in the process of introducing space charging system. In spring 2003, to disseminate cost-awareness at the faculty level, the faculties were informed of their share of rents for the first time. While we commend this initiative, we doubt that the university has sought through the implications of this policy. If Departments and Faculties give up space and the university has no capacity to dispose of excess space, little will be gained. Moreover, in the absence of a proper resource allocation model and full overhead recovery procedure for contracts the likely benefit of greater financial transparency in this area in isolation is dubious.

Conclusion

The PRT commends the steps taken to create a more externally engaged university but recognises the need for further development. In terms of its structures Turku University remains a quintessentially traditional Humboldtian and under-managed university. If the university is going to take on board the mission of external engagement, stronger leadership and better resource management throughout the University (financial, people, space) is needed.

4

The Role of Research, Research Services and Doctoral Training

Research Council

Following the recommendations of the 2000 Review, the University has established a Research Council. It is chaired by the Vice Rector for Research and has twelve members, representing leading researchers from the faculties. Although the Council is primarily concerned with questions of research quality and capacity, the PRT accepts the Council's position that excellence in research is a necessary platform if it is to effectively contribute to the economic development of South West Finland.

However as a purely advisory body, and in the absence of a resource allocation model and financial headroom, we understand the frustration of the Council in terms of its limited powers of influence. For example the Vice Rector for Research noted that "many departments are not satisfactorily equipped; ageing instruments are an increasing problem that appears difficult to solve, particularly when taking into account the fact that experimental sciences are becoming continuously more expensive". We also heard the recruitment and retention of research staff is problematic, especially in the bio-sciences. To address these problems the Research Council has proposed the introduction of an internal postdoctoral personal development system and the head hunting of the best researchers, but so far these schemes remain unfunded.

These are all matters of legitimate concern to a university seeking to maintain and enhance what is already a strong academic research profile. However, apart from taking a positive stance on the principle of fees paid to project leaders as an incentive to win externally funded projects, the PRT found little evidence that the Research Council was taking an active interest in external engagement. Its focus has clearly been on traditional academic matters.

We commend the university for establishing the Research Council. It now needs to be developed as a strong body with influence on the implementation of research policies and oversight of the management of financial, human and physical resources relevant to research. *We recommend that the Research Council assumes responsibility for the third strand activities in research related matters. It should also assume the role of driving forward the agenda of income generation. For this purpose we recommend that part of the annually collected overhead of 5–6 million euros should be under the influence of the Research Council.* Extra funding would be used for infrastructure and setting up a postdoc system (creation of temporary positions) and external engagement. We also believe that Turku

University must be involved in large scale consultancy research that generates genuine surpluses. These surpluses should be earmarked for supporting the infrastructure of basic research.

Research and Industrial Services RISO

The task of the RISO is to support researchers in applying for funding, to draw up research contracts, to provide guidance in issues relating to IPR, to promote commercial applications of research findings, and to act as an interface between the university and the actors involved in technology transfer and business incubation, including the technology transfer company AboaTech Oy which is owned by the Turku University Foundation and the Åbo Akademi Foundation together with Sitra (the Finnish National Fund for Research and Development), the Science Park companies, and the nationally operating Foundation for Finnish Inventions.

Since the initial review, the University has strengthened its in-house expertise in IPR, innovation and EU issues. The research services of the Turku universities have been brought together in joint premises and there are also plans to include the representative of the University Central Hospital in this team. The university has made progress in contractual matters: It has set up procedures for concluding research contracts which incorporate transfer of IPR to the university. Also the procedures for concluding contracts between the university, the University Central Hospital and an outside source of funds have been agreed.

The PRT commends the progress made in strengthening the Research Services. We see clear progression from the initial review. We endorse the plans to extend Turku University Consulting to cover disciplines outside high technology.

Overhead Recovery

Additional information was provided to answer the criticisms in the original report about the University's policy on overhead recovery. The sum appearing in the central accounts, which had appeared low, was only part of the total since a portion remained in the accounts of the unit providing the service. Up to 88% of the net cost of salaries was being received from TEKES projects. We accepted the response to us, though we still felt that the University must ensure that its cost allocation information is sufficient, within its overall financial management system, to give assurance that the income from every research contract is covering direct and indirect costs. The risks here will, however, have been reduced by the University's decisions, which we welcome, to move to standard procedures for concluding research contracts and to appoint a lawyer to strengthen the Research and Industrial Services Team.

Doctoral Training

Since the initial review the university has enhanced its doctoral training by filling the gaps in the national graduate school system: Seven new internal doctoral schools have been established in the faculties of Humanities, Social Sciences and Medicine. As a result virtually all doctoral training is now organised within a graduate school system. Moreover, there are common principles and guidelines for all graduate schools in place: all schools have a director, roll of staff, student register, teaching programme and a website.

The PRT commends the good progress made in doctoral training and recommends that this is maintained by establishing a permanent working group for doctoral training. We further recommend that the university takes up as a matter of urgency the establishment of tenure track system to provide career opportunities for high flying young researchers.

5

The Role of Teaching and Learning including Adult Education

Teaching and Learning Council

Since the initial review the university has set up a multidisciplinary Teaching and Learning Council. The council is chaired by the Vice-Rector for Teaching and Learning and the members represent students, various disciplines, and those concerned with developments in teaching methods.

The Teaching and Learning Council is an advisory body. Its task is to coordinate activities aimed at the development of teaching throughout the university, to guide quality assurance work, and to support pedagogical training for university teachers. The Vice-Rector has a budget for financing activities related to the development of university teaching, pedagogical training of teaching staff, the use of educational technology, and other pedagogical support activities.

The Council has set up a teaching support organisation assisted by the Open University Unit (in the Centre for Extension Studies). The teaching support unit organises pedagogical training for university teachers, supports projects on the development of curriculum and learning environment, conducts research on teaching and learning, and provides pedagogical and technical support on the use of ICT in teaching. The unit is currently based on a three-year project and is administratively part of the Faculty of Education.

We commend the university for the establishment of the teaching support unit as a step forward in the provision of a university-wide service function. We recommend that in due course the unit is transferred from the Faculty of Education to the central administration of the university with strong and permanent links to all the faculties and departments.

The Teaching and Learning Council has set up four sub-committees, for Teacher Education, Open University, Extension Studies, and Quality Assurance. Some of the groups are recent development, (for example QA sub-committee was created in summer 2003), so it is too early to review their work. In order to establish the university as a major lifelong learning institution and to create a coherent teaching and learning system throughout the university, there is a need to enhance the links between basic education and adult education and to ensure that the provision of university education is better coordinated irrespective of the target groups whether they are young or mature students. *We there-*

fore recommend that in due course the chairs of the sub-committee of the Teaching and Learning Council are also appointed to the Council in order to guarantee their full integration into main stream developments.

According to the members of the Teaching and Learning Council, its work has contributed to the fact that teaching matters are more frequently on the agenda of the full University Council. There is also evidence of higher regard for teaching in promotion of staff. However, no formal training programme is required from new teachers. *We recommend in due course the university establishes a formal qualification bearing training programme in teaching as a prerequisite for all those who are appointed to permanent academic positions.* Such a programme should not merely focus on pedagogical matters but should also encompass work based learning issues, research related matters including technology transfer and IPR and other aspects of the third role. We recognise that in pursuing this the University will wish to work in concert with other Finnish universities and so bring them into line with the Polytechnics.

So far most of the work carried out by the Teaching and Learning Council has concentrated on the university's internal matters. The council has not assumed a clear role to encourage the spread of good practice on external engagement and work-based learning across the university, nor has it taken up the task of identifying inadequate or bad performance in teaching. There is also evidence of inadequate embedding of transferable skills in mainstream study programmes. This is an essential requirement if the university is to face the challenges of the Bologna agreement and the inevitable massification of the university with students from diverse backgrounds and prior learning.

We commend the university for establishing the Teaching and Learning Council. We recommend that the Council now be turned into a strong body with a clear role as a driver for the agenda of external engagement throughout the institution. We recommend the Council takes up as a matter of priority the agendas of Quality Assurance, work based learning and accreditation of prior learning. We further recommend the Teaching and Learning Council takes up the task of driving income generation through teaching related activities.

Management of Student Affairs

Within the Rector's Office the management of student affairs is divided between different sections. While methodological development, evaluation of teaching and learning, and the preparation for the Bologna process (as off Sept 2003) are carried out by the University Planning and Development, the International and Student Affairs office is in charge of student services, the student register, international affairs and career services. The organisation of teaching and learning is reflected in the work of the Teaching and Learning Council. The council has a secretariat of three people representing the University Planning

Development unit, International and Student Affairs office and the teaching support unit. However, the division of labour and responsibilities between the members of the secretariat seem unclear and there is no single person to implement and drive through the decisions of the council.

We are delighted that the university has taken our recommendation and appointed a Head of International and Study Affairs but regret that there is still no single person in charge of matters dealing with all student affairs. *We recommend the university strengthens the position of the Head of International and Study Affairs so that it is charged with ALL matters dealing with students affairs including student services, the development of curricula, pedagogical development, and teaching space etc.*

Adult Education

Continuing education is provided by the Centre for Extension Studies, the Centre for Maritime Studies, the Institute of Dentistry, the Faculty of Medicine, the Faculty of Law, the Centre for Translation and Interpreting, the Centre for Learning Research, the departments of Teacher Education in Turku and Rauma, and the Jean Monnet Centre. In the absence of a single provider there are organisational matters to be settled in order to avoid duplication of efforts. In the initial review we identified weaknesses in quality assurance mechanisms and in the integration of the university's adult education activities with the academic heartland. We are delighted that the university has taken concrete steps to clarify the situation (Appendix 4). *We endorse the proposals of the working group for the development of adult education including the clarification of contractual procedures and extension of the use of institutional agreements within the university, the establishment of clear and transparent practices for the costing and pricing and financing degree education, the extension of open university networks, and the widening recognition of prior learning. We recommend the university implements the proposals of the working group as a matter of priority.*

We further recommend the university strengthens the role of the adult education in the university's income generation. We believe that the work of the Centre for Extension Studies should be directed towards generating genuine surpluses for the academic departments. We also note that there are pressures in the national higher education scene to introduce degree programmes designed for adult/mature students and recommend the university prepares itself for this change.

6

Administration and Management

Introduction

In our original report, we devoted a chapter to administration and management, on the basis that it can play a key role in maximising external impact. We commended the University for its determination to move from administration to management, the latter being characterised by seeking out opportunities and making things happen.

We were pleased to note how many of our original recommendations on administration have been addressed by the University. Following an external review by Pricewaterhouse Coopers, a new Chief Financial Officer had been appointed and an additional post of Vice-Rector, with responsibility for resources, had been created. Although no steps had been taken to create the University Resources Council that we had proposed, we accept the Rector's assurance that this would be considered as soon as the new Rectoral team has been elected in the summer of 2004.

Other responses that we welcome include the University's decision to engage an external consultant to review the University's information systems. Following that evaluation, a new cost control system and a research and human resources planning and management system are being introduced.

Having noted this we remain concerned about the underlying processes that these systems have to support. We have already commented on shortcomings in the area of financial management and resource allocation. In the following section we comment on the equally important areas of people management.

Human Resources Management

In our original report, we noted that the University had not taken full advantage of the possibility of a more liberal pay policy; that there was no systematic staff appraisal process; and that there was only limited evidence of a development programme for academic staff with management responsibilities. In these circumstances, we recommended the strengthening of Human Resource Management function within the Rector's office and the provision of a substantial staff development budget. The University's response has been to devolve responsibility for human resources to Faculties, to provide some additional train-

ing for academic staff with management responsibilities and to assert that 'there is currently no need for a strengthened central Human Resources Management Office'. When we asked for a job description of the Deans who have clearly acquired much additional management responsibility since 2000, a short and, in our view, quite inadequate statement was hurriedly prepared.

The University of Turku spends 105 million euros on staff each year. The burden of European employment legislation grows greater and more complex every year, threatening financial penalties and a severe loss of public confidence in any institution which, knowingly or unknowingly, breaks the law. Much of the staff budget is under the management control of Deans who told us there is no systematic management training available. There is no central involvement in selecting Deans or in identifying and training the next generation of Deans. There is no system in place for identifying and rewarding individual contributions to external engagement. We heard of no measures being taken to retain able young researchers, particularly in Biosciences, who may be attracted to Helsinki or Sweden. In view of all these factors, *we recommend the University review, as a matter of urgency, its response to our recommendations in respect of the strengthening of Human Resources and enhancing the staff development budget.*

Progress from Administration to Management

We regard the failure to address fundamental issues of management along the lines noted above for Human Resources as a manifestation of a serious weakness in the administrative infrastructure of the University, which is preventing the University from achieving its potential. The role of the administration is to deliver the University's policies and strategies, which are normally articulated by the Rector and the Senior Management Team. Instead, we have seen ample evidence of a breakdown of working relations between the Head of Administration and his senior colleagues, leading to the frustration of initiatives.

The university administration should, of course, ensure that there are proper links between governance and management and that there is full external accountability as befits a public body. Ultimately, however, the Rector is not just the academic leader but also the Chief Executive of the University and his authority must be respected and acknowledged.

We believe that the tensions between the Rectorate and the Head of Administration that we were aware of in our earlier and this subsequent evaluation must be resolved if the university is to realise its ambitions in external engagement. *We therefore recommend that the University moves quickly to a resolution of the ongoing tension between the academic leadership and the university administration.*

7

Conclusions and Summary of Recommendations

The PRT has found much to commend in the work of the university. It has made great progress since the initial review in enhancing the university-environment interface and responding to the needs of the external stakeholders. While Turku University has not assumed a leadership role in the region building, it has clearly become more responsive in supporting regional development and taken concrete steps to make its strategy operational. The progress is evidently good and in the right direction.

We believe that delivering the high level message of external engagement is not a completed task and has not been fully carried to the faculty and department level. In order to make the university a flagship of external engagement, the third role should be seen as a core mission of the university, an integral part of teaching and research to the extent that it is delivered through them.

We commend the university for establishing the crosscutting councils for research and teaching and learning. As the structures and the machinery necessary for corporate action are beginning to be put in place, they now have to be used to make sure that they address the questions relating to external impact. At the moment the cross-cutting councils largely remain isolated bodies whose role and links with the faculties remain unclear.

While as much as 80% of the PRT's key recommendations of the initial review have been implemented, the remaining 20% are the tough ones as they get into the domain of introducing fundamental changes in institutional culture. We recognise that there is not widespread conviction that management changes are a necessary prerequisite for effective external engagement, but we stand by our original proposition.

We hold to the view that the University is to be commended for its determination to move from administration to management. Significant progress has been made since our last visit, much of it consistent with our recommendations. We recognise that the last stage of this journey is always, in any University, the hardest and the most unpopular within the academic community and administrators but the rewards, in terms of realising the potential of staff and of the University as a whole, are great.

Summary of Recommendations

The Context of the Re-evaluation

The Conduct of the Evaluation

We strongly recommend that institutional evaluations and re-evaluations are systematically co-ordinated by FINHEEC and that a steering group with representation from FINHEEC is in place to guarantee senior management engagement. We further recommend that the follow up self-evaluation report should include quantitative information on the performance of the university (as presented in chapter 2 of this PRT report), a revised SWOT analysis and a response to each of the recommendations made in the initial review.

Relations with External Environment

Towards Greater Responsiveness

We commend the University for the progress that it has made in establishing new academic programmes in key areas relevant to the economic development of South-West Finland.

Turku Science Park

We commend the progress made in developing a regional high-tech cluster strategy within Turku Science Park which is based on the joint efforts of the City of Turku, regional development authorities, higher education institutions, and businesses.

We recommend that much more effort is devoted to carrying the high level message of external engagement to all of the faculties and departments.

Strategic Direction and Academic Leadership

The Role of the Rectorate

We commend the university for taking up part of our recommendation and appointing a third Vice Rector but regret that the Vice Rector's area of responsibility is limited to physical resources and does not cover the vital areas of financial and human resources.

We restate our recommendations from 2001 namely that to carry out its multiple tasks the rectorate needs support distinct from the largely internal administration role of the Rector's Office. We also recommend that consideration is given to the enlargement of the third Vice Rector's area of responsibility to cover financial and human resources and that the decision making powers of the Vice Rectors are clarified.

We recommend that serious consideration should be given to the division of labour between the Chancellor and the Rector in terms of external engagement.

The Role and the Administration of the Faculties

We recommend that a review of the structure of faculties and departments should be carried out without any further delay.

We recommend that the University review again the structural links between the Rector's office at the Centre of the University and the Faculty offices, including the governance/management/academic structures that these offices support. We further recommend the Rector's Office takes closer interest in faculty governance and management and provide a model of good practice and guidelines and principles to guarantee efficient operation (including a template on how often faculty and department governance and management groups should meet, agenda, membership of committees etc.)

Creating Financial Headroom

We recommend the university sets up as a matter of urgency a proper cost control system and a resource allocation model which includes incentives for income generation from external sources. We recommend that the Resources Council, when established, addresses internal resource allocation modelling as a matter of urgency.

Estate Management

We recommend the university takes a full advantage of its favourable location and initiates enhanced cooperation with the City of Turku and other higher education institutions in the campus in the form of sharing infrastructure and services and undertaking joint marketing efforts with the goal of creating financial headroom and building an image of Turku as the second major higher education concentration in Finland.

The Role of Research, Research Services and Doctoral Training

Research Council

We recommend that the Research Council assumes responsibility for the third strand activities in research related matters. It should also assume the role of driving forward the agenda of income generation. For this purpose we recommend that part of the annually collected overhead of 5–6 million euros should be under the influence of the Research Council.

Research and Industrial Services RISO

The PRT commends the progress made in strengthening the Research Services. We see clear progression from the initial review. We endorse the plans to extend Turku University Consulting to cover disciplines outside high technology.

Doctoral Training

The PRT commends the good progress made in doctoral training and recommends that this is maintained by establishing a permanent working group for doctoral training. We further recommend that the university takes up as a matter of urgency the establishment of tenure track system to provide career opportunities for high flying young researchers.

The Role of Teaching and Learning including Adult Education

Teaching and Learning Council

We commend the university for the establishment of the teaching support unit as a step forward in the provision of a university-wide service function. We recommend that in due course the unit is transferred from the Faculty of Education to the central administration of the university with strong and permanent links to all the faculties and departments.

We recommend that in due course the chairs of the sub-committee of the Teaching and Learning Council are also members of the Council are also appointed to the Council in order to guarantee their full integration into main stream developments.

We recommend in due course the university establishes a formal qualification bearing training programme in teaching as a prerequisite for all those who are appointed to permanent academic positions.

We commend the university for establishing the Teaching and Learning Council. We recommend that the Council now be turned into a strong body with a clear role as a driver for the agenda of external engagement throughout the institution. We recommend the Council takes up as a matter of priority the agendas of Quality Assurance, work based learning and accreditation of prior learning. We further recommend the Teaching and Learning Council takes up the task of driving income generation through teaching related activities.

Management of Student Affairs

We recommend the university strengthens the position of the Head of International and Study Affairs so that it is charged with ALL matters dealing with students affairs including student services, the development of curricula, pedagogical development, and teaching space etc.

Adult Education

We endorse the proposals of the university working group for the development of adult education including the clarification of contractual procedures and extension of the use of institutional agreements within the university, the establishment of clear and transparent practices for the costing and pricing and financing degree education, the extension of open university networks, and the widening recognition of prior learning.

We recommend the university implements the proposals of the working group for the enhancement of adult education as a matter of priority. We further recommend the university strengthens the role of the adult education in the university's income generation.

Administration and Management

Human Resources Management

We recommend the University review, as a matter of urgency, its response to our recommendations in respect of the strengthening of Human Resources and enhancing the staff development budget.

Progress from Administration to Management

We therefore recommend that the University moves quickly to a resolution of the ongoing tension between the academic leadership and the university administration.

APPENDIX I: Responses to the recommendation of the first evaluation presented by Rector Keijo Virtanen

(Goddard, Moses, Teichler, Virtanen, West: *External Engagement and Institutional Adjustment: An Evaluation of the University of Turku*. FINHEEC 3:2000, Helsinki: Edita.)

(2) *We recommend the University creates some internal mechanism to ensure that the information gathered in the self-evaluation reports are widely disseminated inside the institution.*

By making use of internal information networks, and by organizing various thematic seminars and training sessions, we have raised the level of internal awareness of the self-evaluation reports.

The establishment of "eWert", the University's own intranet, has significantly enhanced the role of electronic networking within the University's information system.

(3) *We recommend that the faculties departments and administrative services report annually on lessons that have been learnt from their own self-evaluation and from elsewhere in the institution and how this has informed their own practice.*

Each year, the University holds outcome-driven result negotiations with its various operational units, where they report on their activities and achievements during the preceding year and present their operational plans for the year ahead. This annual reporting procedure, both within the Faculties and from the Faculties to the Rector, is an integral component in the University's result negotiations.

The Rector negotiates with the Deans of the Faculties and the Directors of the centrally-affiliated special units, while the Deans in turn negotiate with the Directors of their Schools and Departments.

(4) *While the final self-evaluation is strong on analysis it stops short of clear recommendations for actions to build on strengths, address weaknesses, counter threats and exploit opportunities. This is clearly a task for the new Rectorate and we understand that this work has already begun.*

The basic policy outlines for the University's development are formulated in a quadrennial plan, which is monitored and revised as necessary each year. Among the specific strategies which have been drawn up are those for communications and public affairs, for the development of teaching, and for the use of information and communications networks in teaching. In addition, the University has been actively involved in the strategic development of the Turku Science Park project.

(6) We recommend that the University should endeavour to remain a broadly based institution with external engagement as the focus for institutional development.

The starting-point for the University's teaching and research strategies is precisely its broad disciplinary base.

The high levels of funding awarded by the Academy of Finland confirm the high quality of the University's research track record. The goal is to maintain a high standard in all disciplines represented within the University, while focusing in particular on those areas of strength in both teaching and research specified in the University's strategic planning.

The University has steadily consolidated its collaboration with other actors within the region. Amendments to the Universities Act currently under consideration will in future define a role of social service and regional impact as a third statutory dimension of the universities' mission.

With this aspect of regional impact in mind, the University has implemented a number of academic innovations, including the launching of a master's level course in programming technology in Salo, 50 km to the east; new degree programs in the humanities in Pori and Rauma to the north; and, in association with the recent granting to the University of the right to award the Master of Science in Technology degree, the establishment of a Department of Information Technology.

All in all, the University's profile in terms of regional impact has been significantly strengthened and extended in scope.

(7, 8) The priority should be to encourage the humanities and social sciences to learn from successful experience in parts of science, medicine, law and education to actively engage with the challenges of technological, economic, social and cultural development in the knowledge economy.

We commend the University for the bold steps that it has already taken in revising its government and structure of administration, specifically in relation to the appointment of its Rector and Vice Rectors and the establishment of the Rector's Office.

The University fully agrees.

In Finland, the bulk of external academic funding comes through public sector institutions (especially TEKES, the Academy of Finland, and the EU), and only a small proportion comes directly from industry or the business sector. TEKES' overall budget has not significantly grown in recent years, but despite acute competition, the University has been successful in maintaining its share of TEKES funding. This, however, is largely steered by the priorities of industry, which is in fact one reason for the relatively small proportion of direct funding from industry in comparison with the UK, for example.

The levels of EU funding are also not high, largely because Southwest Finland lies within a region not eligible for high levels of EU funding. The clinical phase of the retraining programme to qualify nurses as physicians will be located in Pori, which is a high-support area for EU funding.

On the other hand, extensive collaboration with other partners in the Turku Science Park project means that the opportunities offered by working within the academic heartland will in future be channelled more effectively into supporting regional initiatives.

In terms of research, Turku is strong not only in the Biosciences and IT, but also in ethics and in the social sciences and humanities.

Examples include the Kulturo centre for production of skilled cultural services, parliamentary research, the establishment of the School of Cultural Production and Landscape Studies in Pori, and the negotiations with the Turku Conservatory, Turku Polytechnic, and Åbo Akademi University towards the establishment of an Academy of Music in Turku. The regional development projects by the Centre for Extension Studies, which cover a wide range of fields, aim both at social inclusion and economic competitiveness.

(10, 11) Changes made at the senior management level now need to be followed through rapidly by changes at the faculty and departmental level if the vision of a more externally engaged university is to be realised. We therefore recommend that the university initiate a review of the structure of faculties and departments.

The review should cover: the number of faculties; the number of departments and responsibilities of Heads of Departments; the role and responsibilities of Deans within faculties in relation to senior management, including responsibility for teaching quality, research co-ordination and external affairs; the procedures for faculty decision making and resource allocation; and the role and responsibility of faculty administrators vis-à-vis Deans and the Rector's Office.

The University sees no need to change the number of Faculties.

Finland operates a national system of categorization of academic disciplines, and the entire university sector follows this system very closely in internal faculty organization. Cross-Faculty research collaboration has very significantly increased (especially in the Biosciences and IT fields), and has in a practical way removed many of the former obstacles to inter-faculty co-operation.

The organization of the central Rector's Office has been further overhauled, with tasks being allocated to clearly defined fields of responsibility, and tasks not requiring central decision-making being delegated to the Faculties and special units. This has consolidated the role of the Faculties, and reduced the role of the central administration in overseeing Faculty internal affairs.

The primary role of the Deans is to safeguard their Faculty's interests, since they are elected from and by the Faculty. On the other hand, through their membership in the University Council, the Deans are also in a position to keep their Faculties informed about university-wide perspectives.

The range of decanal discretion in decision-making has been increased. The Rectorate and the Deans meet together regularly, and these meetings have been found to be very useful. The public role of the Deans as leaders of their Faculties has become more prominent.

Every Faculty has either a Dean or Vice Dean with special responsibility for teaching and learning.

In 2003, the role of the Faculties has been further strengthened by delegating the bulk of personnel recruitment decisions to Faculty level.

The internal structure of the Faculty of Social Sciences is currently under review in order to bring it closer into line with that followed in the other Faculties. With the introduction of the M.Sc. in Technology programme, a new Department of Information Technology has been established within the Faculty of Mathematics & Natural Sciences.

The Departments and Schools, and their Directors, do need to be much more effectively involved in the process of Faculty development.

(12, 13) Because most of the old structures are still in place in faculties and departments we recommend that the Rector's new role needs to be defined and explained.

As the University is forced to rely increasingly on external income, the way in which its infrastructure is financed and maintained will become a major issue. We think these demands may be too much for the present small Rectorate. We therefore recommend that consideration is given to the appointment of a third Vice Rector with special responsibility for resources.

The central academic management team has been strengthened by the appointment of a third Vice Rector, with special responsibility for physical resources (premises and facilities) and for information management.

Each Vice Rector has a clearly defined area of responsibility, and the authority to make binding decisions within their own spheres. This delegation of tasks is intended to free more of the Rector's time for overall strategic planning and management. Nonetheless, the pressure of demands on the Rector's time remains a serious problem.

(14) Within this portfolio of responsibilities in the Rectorate we must emphasise the importance of the Rector himself in relation to the university's external engagement. This must embrace both teaching and research where day to day responsibility resides with the Vice Rectors, oversight of external interface activities like the Centre for Extension Studies, partnership arrangements with public authorities and other universities.

The Vice Rectors chair the special councils for teaching and research, and the allocation of clearly defined areas of responsibility to the Vice Rectors has permitted the Rector to devote more time and energy to looking after the University's external relations. The Rector is now intensely involved in promoting both regional and national impact.

(15) In carrying out these tasks the Rector will need support which is distinct from the largely internal role of the Rectors office, led by the Head of Administration. We therefore endorse the recommendation of the independent review of research services that the University should establish a Regional Development Office, with its head reporting directly to the Rector.

The University does not consider it necessary to establish a Regional Development Office, since the role of the University within the region in terms of impact and of its contribution to leading regional development is adequately and well fulfilled within the existing administrative structures of the Rector's Office.

The offices for Communications & Public Affairs, for Research Services & Industrial Co-operation, and for Recruitment Services each handle the external contacts within their own sectors. The office for Development & Planning has been reinforced, and provides the Rector with direct and broad-based support.

(36) We recommend that the University clarify the roles and responsibilities of the Faculty offices vis à vis the Finance, HR and Research and Industrial Liaison Office and all of those engaged in student affairs.

In terms of financial management goals, advance budget planning, the delegation of liability for costs of premises to the relevant operational units, and of personnel recruitment to the Faculties, are all contributing to greater cost awareness and improved operational planning.

To some extent, the unclear distribution of roles and responsibilities has been due to the poor flow of information. The use of information delivery systems (intranet and internet) has been enhanced, and communications are now accorded central importance both within the University and in external relations.

Industrial co-operation (research contracts and related matters) are managed centrally through the office for Research Services and Industrial Cooperation.

(37) We recommend that consideration be given to staff in the Faculty offices having dual responsibility to the Dean and Head of Administration and also to the appointment of a Director of Student Affairs in the Rector's office to co-ordinate this area.

The administrative model where the Dean is also the head of the Faculty Office personnel has been found to work well.

To continue the process begun in 1998, the Rector's Office was further reorganised in September 2000 with the establishment a new area of responsibility and the appointment of a Head of International and Student Affairs. A new Head of Communication and Information, who reports directly to the Rector, was appointed in May 2001.

(38) We recommend as a matter of some urgency, the strengthening of the Human Resource Management section, and providing it with a substantial staff development budget.

Now that greater autonomous authority has been devolved to the Faculties, the role of the central administration is more clearly defined as that of supporting the Rectorate, and there is therefore currently no need for a strengthened central Human Resources Management office.

Strategic personnel development is the Rector's responsibility.

A revised personnel structure, and national remuneration system, will soon be coming into operation.

Closer attention has been paid to personnel training, in particular to training in management skills for academic personnel. The training of ancillary staff, and the maintenance of skills, are both major challenges for the University and the focus of special attention.

(40) We recommend that the University satisfy itself that its current information systems are able to support the form of management that it desires to achieve.

In 2002, external consultants were brought in to evaluate the University's information systems. In accordance with their recommendations, financial management software has been acquired for costs calculation and time-use monitoring. The information systems will continue to be developed within the limits imposed by budgetary resources.

(41) We recommend the University give serious consideration to seeking external assistance in the implementation of our recommendations about administration. This would be a worthwhile investment to accelerate a transformation that is underway and which will deliver great benefit to the University and its external impact.

A study was commissioned from PricewaterhouseCoopers into the functionality of the University's financial management systems, and on the basis of their recommendations a new Chief Financial Officer was appointed and responsibility for the use of premises and facilities was allocated to the third Vice Rector.

(42) We recommend that the University gives consideration to establishing a University Resources Council, chaired by the Rector and composed of the Vice Rectors and the Deans and serviced by the Head of Administration.

The question is under serious consideration. The options being explored are either the establishment of a Resources Council, or the allocation of financial advance planning to one of the Vice Rectors. A decision will be made in 2004, when the next Rectorate will be elected.

APPENDIX 2:
Major events and achievements
in terms of the University of Turku's external
impact, 2002–2003 presented
by Rector Keijo Virtanen

- reintroduction of first-degree training in dentistry with effect from 1 August 2004
- authorization to award the degree of Master of Science in Technology with effect from 1 August 2004
- introduction of professional retraining to qualify nurses as physicians, beginning in autumn 2003
- introduction of a master's level programme in programming technology, located in Salo, from 2001
- master's level degree programmes introduced in Satakunta county (Pori) from 2001
- extension centres for the University's Centre for Maritime Studies in Pori and Rauma, from 2001
- Turku leads among the Finnish universities in coordinating virtual-university programmes
- research agreement between the PET Centre and Amersham in 2003
- significant research contracts with outside funding sources, ranging from bone research for Schering to the commissioning of a history of the Finnish Parliament
- research collaboration agreement in biotechnology with the Russian Academy of Sciences in 2002
- regular high placing in terms of funding from the Academy of Finland: three centres of excellence in research, two quality centres in teaching, two academicians, four Academy research professors, 14 'graduate school' programmes funded by the Ministry of Education
- participation in the establishment of the Turku Science Park, 2002
- establishment in 2002 of a research laboratory in Turku for the national Technical Research Laboratory
- establishment in 2002 of a research laboratory in Turku for the Game and Fisheries Research Institute
- establishment in 2002 of the Functional Foods Forum
- establishment and progressive enlargement since 2000 of the Baltic Sea region universities network, now comprising 19 universities
- Jean Monnet Centre of Excellence 2001

- active role of the university from 2001 onwards in the Finnish planning and implementation of the 'Bologna process' for the harmonization of university degree structures across Europe, including two of the national coordinator roles for specific disciplinary categories
- Rector Keijo Virtanen Chair of the Council of CIMO (the national Centre for International Mobility) since 2000
- Rector Keijo Virtanen a member of the national Council for Science and Technology since 2003
- Vice Rector Eero Vuorio Chair of the national Health Research Council (Academy of Finland) since 1998
- University Advisory Council since 2000
- alumni operations launched at university level in 2002
- a Joint Regional Strategy for the universities and polytechnics in Turku, 2002
- investigation and rectification of the misuse of research funds by Professor Urpo Rinne, 2000–2001
- a central role for the University in drawing up both the City of Turku's cultural strategy (2001) and citizens' information society strategy (2003)
- participation in four centre of expertise programmes run by the Ministry of the Interior
- award of the Tieto-Finlandia prize (Knowledge Finlandia) for popular scientific literature to Professor Esko Valtoja, 2002
- completion of new buildings and premises for the Faculties and the Science Park, 2000 onwards (including Educarium, Publicum, the Sirkkala Garrison Site, and the ICT Building)
- On the basis of an evaluation of the universities, a special productivity bonus granted fro Turku University by the Ministry of Education for 2004. The University is continuing development as a multidisciplinary institution, and its impact and role in regional development have been steadily increasing; its profile has been significantly strengthened and diversified.

APPENDIX 3: Co-Operation between the City of Turku and the Universities in Turku

City of Turku, Government & Community Relations

Memo
29 August 2003

CO-OPERATION BETWEEN THE CITY OF TURKU AND THE UNIVERSITIES IN TURKU

There is strategic partnership between the City of Turku and the universities in Turku. Their mutual co-operation is well established and diverse, as well as constantly expanding. Reconciliation of strategic interests between the City and the universities is particularly significant: the parties have joint opinions and mutual understanding of the guiding principles and challenges of the development of the city, the region and the province. The daily operations of the City and universities involve exchange of information, expertise and know-how in a variety of fields. The advantages of the continuously increasing co-operation are indisputable for both parties.

There are three universities in the Turku region, namely: the University of Turku, Åbo Akademi University and the Turku School of Economics and Business Administration. In addition, there are four polytechnics in the area: the Turku Polytechnic and the national polytechnics Diaconia Polytechnic (Diak), Humanities Polytechnic and Sydväst Polytechnic (Yrkeshögskolan Sydväst).

The institutions of higher education in Turku are presented in Appendix I.

The cluster of academic education in Turku provides a basis for the success, welfare, economic growth and rich cultural life both for the City of Turku and for south-western Finland. The main operating area of the universities involves the south-western parts of the country, particularly the Varsinais-Suomi area.

With its population of over 447,000, Varsinais-Suomi is the third biggest province in Finland. The largest city, Turku, has approximately 173,000 inhabitants, while the smallest municipality, Iniö, has approximately 240 inhabitants. Industry and construction have a relatively important part in the business structure of the province (37%). The services (38%) and public sector (19%) also have a significant share. The business structure varies in different regions.

Turku is the leading centre of academic education and research in the region, as well as being the centre of industry and services. The most significant branch of industry in Turku is metal industry based on naval technology. The Salo region has grown into a national centre of electronics industry, and a strong cluster of high technology expertise is developing along the Turku-Salo axis.

Co-operation is based on joint regional development strategy

In 2002, the universities in Turku drew up their regional co-operation and development strategy that is based on the joint strategic focus of the City of Turku, Regional Council of Southwest Finland and other central actors in the region. Regional strategies are united by commitment to high level of expertise and technological development in selected special fields: biotechnology, information technology including cultural and content provision as well as material production with special emphasis on metal, naval and graphic industry.

The main goals both for the universities in Turku and for the City of Turku's operating environment are high quality of life, creating new businesses in selected areas, as well as enhancing the competitiveness and attraction of the region. To reach these goals, business-specific co-operation is being developed in the area. The universities have a central role in this work. The universities in the Turku area carry out research work in accordance with their own profiles and tasks, as well as taking care that versatile and sufficient training is provided.

The regional co-operation and development of universities is a process based on continuous interaction of the parties; during the process, the guidelines of co-operation and division of duties are specified and results of regional development work assessed. The strategy is also a joint learning process during which the universities and interest groups develop the forms of co-operation. The universities work in active co-operation with regional actors to anticipate future developments and regional needs of expertise and to assess the effects of the operations, as well as setting up regular communication forums to enhance the regional dialogue.

In accordance with their strategy, the universities in the Turku area participate in the regional development of the whole of south-western Finland as producers of research information and expert labour force and as intermediaries and transmitters of information, expertise and know-how. Field-specific co-operation of the spearhead fields is developed in particular. Furthermore, the availability of expert services for the needs of public administration will be improved.

The universities are continuously developing structures and operating models to improve the availability of their multi-business expertise in the surrounding society. By their own operations, the universities are also strengthening international co-operation in the south-western parts of Finland.

The regional innovation system: the most important challenge for co-operation

Turku Science Park is the most central forum and the most important challenge for the continuously developing co-operation between the City of Turku and the universities in Turku. Apart from the university campuses, the Turku Science Park area consists of Turku Technology Centre, university hospital and a large number of information-intensive development companies.

Owned by the City of Turku, the neighbouring municipalities and the universities' support foundations, Turku Science Park Oy is a group of companies that is responsible for the overall development, building and marketing of the Science Park area. The parent company also co-ordinates Southwest Finland's centre of excellence programmes, as well as being responsible for arranging the incubator operations. Opera-

tive subsidiaries are Turku Biovalley Ltd that is responsible for the development of operating prerequisites in the bio-business, and ICT Turku Ltd that develops expertise in information and communication technology as well as culture and content provision. The responsibility for the development of the operating prerequisites in the materials operations lies with the parent company. The goal is to form a materials business cluster around the Science Park company in the same way as in biosciences and ICT. In order to secure the expensive equipment services of the field, the City of Turku, companies and the universities' support foundations have jointly established equipment service provider company TopAnalytica Oy Ab.

In order to strengthen the common will of the region and to guarantee the continuation of strategy work, there is a consultative committee comprising of top management of different interest groups operating in the company. A consultative committee consisting of international experts will also be formed for Turku Science Park Oy.

The co-operation between the universities in Turku and the Science Park companies is based on combining their core competences. University researchers who are in their organisation responsible for the development of the strengths determined in the strategy consult the Science Park companies on the research directions of the centre of excellence programmes. On the other hand, the Science Park companies have the principal responsibility for creating the interface with the business world and for the development of the incubator operations.

The New Technology Foundation, in whose Board the universities and e.g. the City of Turku have representatives, provides an organised setting for the regional discussion on the development of technology.

Transfer of know-how to benefit both parties

In addition to hi-tech businesses, other expertise of the universities is utilised more intensively in the development of the City of Turku and the whole area. The wide range of knowledge and know-how of the universities in i.a. humanities, social and legal sciences and pedagogy, as well as business research and administration is a crucial resource in the strategic and operational development of the City of Turku.

Utilisation of expertise and the newest results of scientific research bilaterally in the development of the operations of both the City of Turku and the universities is a constantly growing sector of co-operation. The City and universities exchange experts regularly in their strategic and planning teams. The Rector of the University of Turku recently acted as chairman of two significant working groups of strategic planning in the City of Turku, namely, the cultural committee that was planning the cultural policy of the city and the working group that was preparing the citizen's information society programme.

Regular contacts and interaction between the universities and the City of Turku, other public sector regional actors and companies are strengthened by setting up field-specific consultative committees that act i.a. as forums anticipating the needs for training.

In 2004, the universities will start the Turku Development Forum in co-operation with the City of Turku. The forum will organise regular, international seminars to discuss topical themes of regional development.

Practical examples of co-operation

On the basis of their joint strategic interests, the City of Turku and the universities in Turku have significantly intensified their co-operation in communication and domestic and international marketing of the area in recent years. Joint efforts have been increased in issues related to supervision of interests in Finland and internationally. As far as international contacts are concerned, the Baltic Sea Region is an area of special emphasis both for the City and for the universities. The University of Turku is going to join the European office of the City of Turku in Brussels.

The City of Turku has donated the professorship of media research to be shared between the University of Turku and the Turku School of Economics and Business Administration. The City provides significant annual support to university education in the fields of information technology and bioinformatics, as well as supporting e.g. the Centre for Surface Technology of Materials, equipment purchases of the Functional Genomics Centre, and the Functional Foods Forum.

Finland Futures Research Centre of Turku School of Economics and Business Administration operates as a regionally, nationally and internationally significant organisation of research, training and development. The Centre outlines sustainable future. One specific goal of the Centre is to develop indicator systems and anticipating methods focused on analysing the relationship between environmental and societal development. The services provided by the Futures Research Centre are an important local resource for the City of Turku.

The special strength of the environmental research at the University of Turku and Åbo Akademi University lies in extensive research ranging from molecular level to ecosystems and geoinformatics. In addition to the natural science approach, environmental research emphasises jurisprudential and social points of view, such as city research.

The Regional GI Service and Network in Southwest Finland produces e.g. digital maps and information on Southwest Finland. The service is maintained by the University of Turku, Regional Council of Southwest Finland and Southwest Finland Regional Environment Centre, and a wide network of actors are involved in the operations. Provision of services will be expanded from environmental services to other sectors such as land use and logistics.

Enhancing well-being

The universities in Turku participate in the development of the social, health and welfare sector of their operating area following their own training and research profiles. Co-operation with the City of Turku's provision of services in the welfare sector is extremely expansive and diversified.

As for the health sector, Turku City Public Health Department and the University of Turku have a joint, fixed-period professorship of geriatrics the costs of which they share on a fifty-fifty basis. There are many joint research and development projects based on co-operation in progress in the field of enhancing health and well-being. One example of practical co-operation in training is the joint consulting of patients organised by the University of Turku, Turku Polytechnic and Turku City Public Health Department. The services subject to a charge are run by Turku City Public Health Department and the practical work is done by students of medicine of the university and students of health care of Turku Polytechnic under the supervision of their teachers.

Basic and special expertise in the social sector as well as research and transfer of know-how in Southwest Finland is co-ordinated by Southwest Finland Centre of Excellence on Social Welfare (VASSO). Turku City Social Services Department leads the operations. Apart from the University of Turku, Åbo Akademi University and Turku Polytechnic, the Special Care District of Southwest Finland and some municipalities in the area participate in the operations of the Centre.

The University of Turku has long been running multidisciplinary research of children and adolescents. The universities in the area have commenced a joint project in planning a research centre of children and young adolescents pursuant to their own profile. The centre aims at responding to the growing social concern for the health, social exclusion, learning difficulties and social problems of children and adolescents. Securing the well-being of children and adolescents is one of the focal points in the strategy of the City of Turku.

Co-operation in cultural policy

The centre of cultural life in the province, Turku is a city providing a full range of cultural services. Professionally produced cultural services are organised by Turku City cultural services as well as private individuals and associations. The universities in Turku influence the supply and demand of cultural services in Turku and the province by training cultural actors and customers of cultural institutions and services. The University of Turku provides Finland's broadest selection of art and culture subjects. The people acting in the university sector are actively involved in the cultural activities in Turku, both as initiators and participants.

The co-operation between the universities in Turku and the City is based on intellectual partnership that promotes the creation of projects and events between culture and science. Employment of young artists is promoted by the Centre of Expertise for Cultural Production Kulturo and the ARSNET project in whose operation both the City of Turku and the universities are actively involved.

The City of Turku and other public and private actors in the area increasingly utilise the services of the Academic Career Services in Finland. In addition to academic expert employees, the unit mediates master's theses to the private and public sector through the Internet-based Gradunet system.

Turku is an important student city that annually arranges an action-packed Ready-Study-Go! welcome event for the new students coming to the city.

In the library field, the regional co-operation is co-ordinated by the co-operation forum of the university libraries, Turku City Library and the library and information services of Turku Polytechnic. The universities in Turku and Turku Polytechnic use the same Voyager library system, and they are included in the Linda common directory which allows, for instance, the use of the same library card, good information search opportunities and co-operation of libraries in cataloguing. The local libraries also arrange library training together, as well as implementing the national library events arranged in Turku.

The virtual forms of communication, working and studying based on the use of information networks make it easier to cross the borders of different organisations, as well as making more intensive co-operation between universities and other actors in the area possible.

The newest advance in Turku is Turku Science Park's mobile network solution Sparknet that links the networks and systems of the universities and the City of Turku into a completely new kind of electronic service concept.

Universities and institutes of higher education in Turku region

University of Turku

Established in 1920, the University of Turku is the first completely Finnish multidisciplinary university in Finland. The number of students is approximately 17,000, of which 12,000 are undergraduate students. Furthermore, approximately 10,000 students receive open university instruction and 11,000 students participate in extension studies. The total number of staff is approximately 2,500. The faculties of the University of Turku are as follows: Faculty of Humanities, Faculty of Mathematics and Natural Sciences, Faculty of Medicine, Faculty of Law, Faculty of Social Sciences and Faculty of Education. The strengths of research and instruction at the University of Turku lie in biosciences, mathematical methods, research in learning and education, as well as research and training in cultures and social interaction processes. In terms of regional effectiveness, the central fields include information technology, content provision, cooperation in the Baltic Sea Area and material research.

Åbo Akademi

Established in 1918, Åbo Akademi University has a special role as the university for Swedish-speaking Finland. The number of staff is 1,300, there are approximately 7,600 undergraduate and postgraduate students and approximately 9,600 adult students. Åbo Akademi University has five faculties: Faculty of Humanities, Faculty of Mathematics and Natural Sciences, Faculty of Economics and Political Science, Faculty of Chemical Engineering and Faculty of Theology. In addition, the university has two faculties in Vaasa, namely, Faculty of Education and Faculty of Social and Caring Sciences. The central fields of expertise at Åbo Akademi University include environmental and biosciences, process chemistry, material research, computer science and data technology as well as human rights.

Turku School of Economics and Business Administration

Established in 1950, the Turku School of Economics and Business Administration has 2,000 graduate students. The number of staff is approximately 270. A total of approximately 800 students participate in continuing education annually, while 500 students take open university studies. The Turku School of Economics and Business Administration is a university providing research and higher education in business science. The School consists of five departments, namely: Department of Management, Department of Accounting and Finance, Department of Marketing, Department of Economics and Departments of Languages and Communication. Furthermore, the Turku School of Economics and Business Administration has two separate departments, namely: Business Research and Development Centre and Finland Futures Research Centre. The School's special areas of expertise include business administration sciences, information management and economics with special emphasis on business economics.

Turku Polytechnic

Administered by the City of Turku, the Turku Polytechnic was established in 1992 as a temporary polytechnic of technology. The Polytechnic offers education in the following fields: technology and traffic, administration and commerce, tourism, catering and food services, health care and social services, arts and media and natural resources. The number of staff is approximately 700. Approximately 8,800 students are studying for basic degree, and the number of students in continuing education is approximately 5,500 annually. The tasks of Turku Polytechnic have expanded from providing education to research and development and regional development supporting local and regional business life.

Sydväst Polytechnic

The local Sydväst Polytechnic (Yrkeshögskolan Sydväst) was established in 1996 as thirteen Swedish-language educational institutes united into a network polytechnic. The number of students is 1,400 and staff 125. The fields of education include tourism and culture, technology, economics and maritime studies, as well as human resources.

Diaconia Polytechnic (Diak)

The Diaconia Polytechnic (Diak) is a national network polytechnic. There are three degree programmes: social, health and pedagogy studies, sign language interpreter's studies and the degree programme of communications and media. The number of staff at Diak is approximately 270, and the number of students is 2,470. The Turku unit of Diak has a staff of 21 and the number of students is 190 annually, including those in adult education. The Turku unit offers education in sign language interpretation and communications and media. In the degree programme of communications and media, students can choose between journalist's studies for different media or studies in communications education.

Humanities Polytechnic

The Humanities Polytechnic is a national network polytechnic offering polytechnic degree programmes in civic activities and youth work, sign language interpretation and cultural management and production. The Humanities Polytechnic has a staff of 120, and the total number of students is approximately 1,300. The Turku unit provides a polytechnic degree programme in cultural management and production. The Turku unit has a staff of 8, and the number of students is around 100 annually.

Extension studies

The universities and polytechnics in Turku carry out their training and development task in accordance with their own profile and special expertise. The division of duties in the provision of extension studies is developed on the basis of the strengths of each unit. The University of Turku is an expert in the development of multiform instruction. Åbo Akademi university serves the extension study needs of the Swedish-speaking population and regional development. The Turku School of Economics and Business Administration focuses its extension studies on business know-how. The Turku Polytechnic organises extension studies and services in a variety of fields of working life, as well as organising extensive adult education leading to a degree.

APPENDIX 4: Responses to the recommendations of the first evaluation based on the report of the working group of adult education, May 2003 presented by Kari Seppälä, Director of the Centre for Extension Studies

“Key questions for the University as a whole, not just the Centre, include: “What are the priorities?” “Who delivers them?” “Who does what?” “Who pays who?” “How are charges determined?” “How are standards assured?””

The University will clarify the contractual procedures and enlarge the use of institutional agreements.

The University will define the objectives in volume and content as well as resources elaborately in the annual contracts.

The University will allocate funding for the open university as a part of the results management system. The detailed distribution will be specified in the contracts with the departments.

The objectives, outcomes and resources of open university will be defined in contracts with the departments.

The University will establish clear practices for the costing and pricing as well as financing of the degree education. The code of practice will help the conclusion of agreements between the centres for continuing education and other producers.

The University supports the joint ventures of the institutes and the Centre for Extension Studies.

The faculties, their institutes and the Centre for Extension Studies can implement master's programs and supportive studies in co-operation.

“Economic development is not just about people – it is also about technological innovation, the performance of firms and building the institutions that support these processes.”

The University will carry out projects that are suitable for both the University profile and the regional and special programs.

So as to make appropriate decisions of the direction of education, the University will develop systems that can take into account the changes in demand.

The University will improve the potential to make investments and manage the financial risks.

The chances to come up with down payment for EU projects will be improved.

The University will prepare itself for the time after 2006, when the role of the regional and structural policies of the EU will be transformed.

“To facilitate the integration with the academic heartland that we think is necessary, we recommend that the work of the Centre for Extension Studies is overseen by the proposed Regional Development Council and its work focused through the proposed regional development strategy, particularly the cluster strategy. The Council should also ensure that financially transparent contracting principles are in place between the Centre and all academic departments.”

The University tries to find a more active role for the academic community in the planning and production of continuing education.

The University will set up a detailed brief for the Centre for Extension Studies. The role of the Board of CES will be redesigned.

Open university networks will be created in the Regional Councils of Satakunta and Finland Proper.

The University Centre of Saaremaa will have a key role in the regional projects within the Baltic States and Poland.

“We recommend that the proposed Learning and Teaching Council, as a matter of priority, agrees with the Centre the establishment of appropriate quality assurance mechanisms for the programmes it is managing on behalf of the University.”

The faculties and their institutions account for the academic standard of education.

The Centre for Extension Studies is particularly accountable for the applicability of the service for the student. The parties develop together the pedagogic solutions, the functionality of which will be followed.

A tutoring and guidance system suitable for adult learners will be developed.

The University will widen recognition and accreditation of prior learning. Pilot experiments will enhance the academic accreditation of prior experiential learning.

The University will support research on academic adult education. Intensifying the research co-operation will give an impetus to developing the services.

Development of quality is the main aim of international co-operation. The University will use its top experience so as to produce continuing education for international markets.

The University will support the teaching staff facing foreign students.

“We recommend that under the auspices of the Learning and Teaching Council, the Centre is charged with contributing to the spread of good practice in open distance learning across the University.”

The University will sharpen its national and international profile as a developer of blended and e-learning. The development of degree education will exploit the expertise in the pedagogy of adults.

The open university will especially aim at the development of e-learning, tutoring and guidance.

“We recommend that the University’s regional development strategy provide guidance as to the responsibilities of different units, including the Centre for Extension Studies, in maintaining relationships with other educational institutions in Turku.”

The Regional Development Strategy of the universities and polytechnics in Finland:

The University of Turku and the Turku Polytechnic will increase their co-operation in regional development so as to find their own profiles in the innovation chain.

“We recommend that the Learning and Teaching Council assume responsibility for ensuring a closer integration of the Centre for Extension Studies with the work of the Faculties and Departments. More specifically it should develop a strategy for defining how the University’s student recruitment is allocated between the different channels (young students from the schools, Open University students, Masters programme students, students graduated from AMKs etc.) and how the different programmes are organised within the University (co-operation and division of labour between different faculties and departments and the Centre for Extension Studies).”

The University will set up sections of open university and continuing education within the Teaching and Learning Council. The tasks and roles of the sections will be defined separately.

The Different profiles of Continuing and Degree Education will be sharpened. The diversification of specialized studies supports the return to the University.

The channel from open university to degree studies will be improved and the access criteria adjusted.

The status of the students as well as the connected rights and duties in various training modes will be defined.

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