U. Dahllöf, J. Goddard, J. Huttunen, C. O'Brien, O. Román & I. Virtanen

Towards the Responsive University

The Regional Role of Eastern Finland Universities

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Oy Edita Ab Helsinki 1998 Higher education institutions are facing more and more demands due to the rapid changes in their environment. It is therefore a pleasure for the Finnish Higher Education Evaluation Council to publish this report which considers many facets of the regional role of Finnish universities.

According to the Development plan for Education and University Research issued by the Government for 1995–2000, all institutions of higher education are evaluated once by the end of the period. In 1996, three Eastern Finland universities, Lappeenranta University of Technology, University of Kuopio and University of Joensuu, set up a joint steering group to formulate the guidelines and to monitor the evaluation of their regional engagement. The role of the Finnish Higher Education Evaluation Council was to act as an advisory body in the self-evaluation process.

At the same time the Council appointed an external evaluation group, Peer Review Team. It consisted of the chairman, Professor Urban Dahllöf, a Swedish researcher on evaluation and regional issues in higher education, Professor John Goddard, a senior university manager and researcher in the field of regional development, and Professor Ilkka Virtanen, a former rector with knowledge of Finnish universities, especially management and financial issues. These three members of the Peer Review Team visited all the three universities. The core group was accompanied by a universityspecific specialist, who visited the university in question and participated in most of the meetings of the Team. Professor Chris O'Brien, an expert in engineering and management, visited Lappeenranta University of Technology. Professor Jussi Huttunen, Director General of the National Public Health Institute and with a research background in medical sciences, was mainly responsible for the evaluation of University of Kuopio. Dr Ola Román from the Swedish National Agency for Higher Education participated in the evaluation of University of Joensuu. The Council recruited Project Secretary, M.Ed. Anne Vähäpassi, who accompanied the Team during the site visits and edited the report.

The Council is grateful to the Team, which has carried out the task in a very ambitious and professional way. The members have shown commitment to the evaluation as such and concern about the regional development issues throughout the Finnish higher education sector. Since this evaluation is the first one to review the regional role of universities, it also sets up a frame of reference, which most probably will be utilised in future evaluations.

Kauko Hämäläinen

Anna-Maija Liuhanen

Secretary General

Senior Advisor

The Peer Review Team would like to thank all of those participating in the evaluation processes at various stages. We wish to express our gratitude to the Finnish Higher Education Evaluation Council (FINHEEC) for the opportunity to participate in the evaluation of the Eastern Finland universities; we thank the Chairman of FINHEEC, Professor Jarmo Visakorpi and Secretary General, Dr Kauko Hämäläinen, for familiarising us with the work and role of the Council; our special gratitude is devoted to Senior Advisor Anna-Maija Liuhanen, who provided us with abundant background material and facilitated the process in many aspects, both practical and content-wise.

In Ministry of Education Councellor of Education, Ms Anita Lehikoinen and Secreteary for Research Affairs, Ms Monica Melén-Paaso gave us useful information about Finnish higher education policy and an overview of the situation why Eastern Finland universities were originally founded. Head of Department, Mr Anssi Paasivirta from Ministry of Labour devoted time for a discussion over the questions in Annex 1 of this report. We were impressed by the honesty and candidness of these officers.

We also appreciate the hospitality and friendliness of the personnel of the three universities. In particular, we wish to congratulate the research teams who have produced self-evaluation reports, which will undoubtedly become important contributions to the international literature on the role of universities in regional development. The universities provided us with good working conditions and thanks to their co-operation we were able to invite a multitude of interlocutors from within and outside the university.

Statistics Finland provided the Team with a lot of background material, which helped the further analysis. In that connection we want to express special thanks to Ms Ulla Kaipainen for a very good co-operation within tight time limits. Last but not least, we owe lots of thanks to our secretary, Ms Anne Vähäpassi, M.Ed., for excellence in note taking and editing. Moreover, thanks to her firm hand combined with good humour, she managed to balance the quite heavy programme so that it became both an enriching and a most pleasant learning experience.

August 1, 1998

Urban Dahllöf John Goddard Jussi Huttunen Chris O'Brien Ola Román Ilkka Virtanen

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1.1 The National Situation

About 40 years ago, Finland entered upon a deliberate regionalisation policy that led to an establishment of new universities in relatively remote regions where many of the natural resources of great importance for the national economy are found. By the 1970's, Finland had as many as nine university towns outside the metropolitan area of Helsinki, the capital. Three of these, which are the subject of this evaluation, are located to the eastern part of the country. The evaluation has been undertaken at a critical time for the three universities in Eastern Finland. First, they have been operating for about thirty years and can now be regarded as established institutions of higher education; having reached that position it is now appropriate to evaluate their contribution to the economic and social development of Eastern Finland and also to consider how well equipped they are to pursue that role into the future. Second, the new University Act has given all Finnish Universities greater freedom to pursue their own distinctive mission and this raises the question of how the three universities are using that opportunity to develop their regional role. Third, and quite incidentally, all universities have elected new rectors who have the opportunity to reappraise the trajectory of the university including the strength and character of its regional engagement. Fourth, the establishment of the AMK Institution (Polytechnics) with very strong regional affiliations has created a new network of higher education institutions to which the universities will have to relate in either strengthening or indeed diminishing their regional activities. Finally, outside of the education domain, changes in the structure of regional governance, in part driven by the opportunities arising with the EU structural funds, have led to the creation of a new set of actors in the form of regional councils and regional offices of central government departments with whom the universities will now have to engage.

1.2 International Trends

In considering the regional role of universities the Evaluation Council has addressed a concern which is not unique to Finland. An expansion of higher education in remote areas also took place in its Nordic neighbours. The most spectacular example of this is Tromsö in Norway, the northern-most university in the world. But also the Norwegian district colleges as well as new Swedish universities and colleges belong to the same movement. The early Finnish experiences were studied in a research project led by Antikainen at the University of Joensuu. Also other Nordic writers made important contributions to an OECD conference on Education and regional development (1979).

As a consequence of a strong growth of these higher education institutions, the challenges connected with new regional universities and different types of colleges on their way to reach university status, became the topic for two international development seminars arranged by the present Mid-Sweden University College in 1992 and 1995. The contributions were collected in two volumes, "New universities and regional context" (1994) and "Expanding colleges and new universities" (1996). These two reports concentrate on the specific conditions in sparsely populated western countries and remote regions within them such as Scandinavia, Canada and Australia. In the latter case the story about the Colleges of Advanced Education (CAEs) and the new "regional" universities offers an interesting comparison to the Nordic developments. The West report on the Australian Higher Education system is of particular interest in this connection.

In part, stimulated by a report from the Committee of Vice Chancellors and Principals on Universities and Communities, the UK National Committee of Inquiry into Higher Education (the Dearing Committee) devoted a full chapter in its final report to this theme. The ongoing Kellogg Commission on the future of the US Land Grant Colleges is also addressing the processes by which these foundations engage with their communities. Finally, and returning to Scandinavia, the Swedish Government has identified a "third role" for Universities, namely their contribution to the community over and beyond teaching and research.

These concerns have been picked up by international bodies. The OECD Programme on Institutional Management in Higher Education (IMHE) has an ongoing review of the "response of universities to regional needs" and the Committee of Rectors of European Universities (CRE) has launched a parallel project on "the dialogue of universities with their regional partners". Significantly two of the universities in Eastern Finland (Joensuu and Kuopio) are participating in these international exercises. The basis for this international interest in the role of universities in regional development can be found in a coming together of the concerns of agencies with responsibility for territorial development with those in charge of the management of higher education.

1.3 Regional Developments

From the development perspective, the contribution of universities has a number of dimensions, which are susceptible to quantitative and qualitative assessment.

First, there is the direct economic impact of universities as an economic sector. Universities are major employers of relatively high-grade staff with considerable local spending power. While many of these staff may not be recruited within the region, support staff will be. The student body itself will also have a direct local impact through local purchasing. Students will be a net addition to the regional economy, insofar as they are recruited from outside the area. All of these impacts are readily measurable by conventional economic multiplier analysis. Likewise the effect on

the overall employment structure of each region can be readily assessed by setting higher education in the context of the overall regional profile. This usually reveals university employment growing whilst other sectors (e.g. agriculture and manufacturing) are declining.

These direct employment impacts are essentially static. More significant are the dynamic effects which a university can have through interaction with industry. These are more difficult to measure but a university can audit the geography of its industrial interactions by identifying the location of partners in research grants and contracts, consultancy, exchanges of research staff and spin-out of university companies. Because such research-based activity is essentially global in character only a small part is likely to have a regional relevance. A more significant impact is likely to be through teaching and the recruitment of graduates by regional businesses and through programmes of continuing professional development. Here it is possible to monitor the flow of students from home origins through different courses into local employment opportunities.

The final area is the contribution of universities to social and community development. In many countries there are long established regional and local variations in participating in higher education and in the skills of the local workforce. Data on the flow of students through universities can also be used to identify the contribution of universities to raising levels of education attainment in different parts of the country and to enhancing skill levels of the workforce by recruiting non-local students and placing them with local employers. Vocational programmes in such areas as medicine and social sciences, which bring direct community benefits, can be identified. In addition to programmes targeted to the needs of employers, universities can demonstrate contributions to non-vocational education and cultural programmes in the Arts. The role of the university staff and students in providing significant local audiences for the regional arts can also be identified. Last, but not least, the role of university staff and students in providing key leaders in local civil society by participating in voluntary activities, interpreting world affairs in the regional media and undertaking strategic analysis of the regional economy and social situation can be documented.

The relevance of these discussions to regional development are neatly captured in two statements quoted in the UK report "Higher Education in the Learning Society":

The skills of a nation's workforce and the quality of its infrastructure are what makes it unique and uniquely attractive in the world economy...so important are these public amenities, in particular the university and the airport, that their presence would stimulate some collective symbolic analytical effort, even on a parched desert or frozen tundra. A world class university and an international airport combine the basic rudiments of global symbolic analysis: brains and quick access to the rest of the world. (Reich) The shift to knowledge-intensive capitalisation goes beyond the particular business and management strategies of individual firms. It involves the development of new inputs and a broader infrastructure at the regional level on which individual firms and production complexes can draw. The nature of this economic transformation makes regions key economic units in the global economy...regions must adopt the principles of knowledge creation and continuous learning; they must in effect become learning regions. (Florida)

1.4 Institutional Management Reforms

These regional perspectives have come together with the emergence of new approaches to institutional management. In the past, higher education in most countries has been primarily funded by national governments to meet national labour market needs for skilled manpower and to provide a capacity to meet national research and technological development needs. In terms of higher education management this has generally meant a single paymaster, relatively secure long term funding, the education of a readily identifiable and predictable population of full-time students in the 18-24 year age range and destined to work in the corporate sector, and the provision of a well-founded infrastructure to support the pursuit of individual academic research and scholarship. Such a regime imposes limited demands on university management and indeed supports the ethos of academic self-management and collegiality.

This model is being challenged at the national level by moves from an elite to a mass system of higher education and a new emphasis on lifelong learning, by the pursuit of efficiency gains in public funding, by the rise of new modes of knowledge production and distribution outside of universities which are challenging the university monopoly, and by the opportunities for new ways of delivering education and training made possible by information and communication technologies. Each of these developments challenge the privileged relationship between universities and national ministries of education as new clients for research and learning and new intermediaries articulating these demands come forward. Characteristically these new players pursue an agenda, which is local or regional in character—SMEs represented by Chambers of Commerce; lifelong learners by community development associations and local labour market agencies; arts and cultural industries by local authorities and new media interest by globally backed local cable companies. These bodies recognise that universities have much to offer through locally relevant knowledge production; as gateways to global information resources; in human capital formation through creating a flexible, adaptable work force and in providing leadership within formal and informal local governance structures.

In the light of the national and international context it was appropriate to appoint a Peer Review Team which brought together those with experience in higher education policy and management, regional development, Finnish higher education and the special subject areas of each of the universities (technology, education and medical/health sciences). Three Team members were responsible for themes common to all universities whilst the remainder took lead roles for each of the institutions, with support from one of the core Team members. The final report however, is a collective responsibility.

From the outset the evaluation was intended to assist the development of the universities and not to be judgmental. The Review Team has been concerned with the process of the evaluation as well as the final report presented here. Each university was asked by the Evaluation Council to produce a self-evaluation report covering a number of common themes. (These were identified by the Council staff prior to the appointment of the Peer Review Team.) All three universities established research teams with the relevant skills and drawn from the central administration and academic departments. The teams analysed institutional statistics and undertook internal interviews and surveys with the Rectorate, Deans, Heads of Departments, students and external stakeholders in the region, such as municipal and regional authorities, individual businesses and their representative bodies. The self-evaluation reports were made available to the Peer Review Team who then identified groups of people they would like to meet on two-day site visits to each university.

Following the site visits the Review Team highlighted a number of areas on which they required further written information. These focused on issues of institutional management relevant to the regional role and which were not specified in the original briefing provided by the Evaluation Council; viz. strategic planning, financing, HR and student management, and the role of the Centre for Continuing Education/Training and Development. The Review Team also identified areas of central government policy relevant to the role of universities in regional development about which further information was required. This was obtained by means of interviews/questionnaires to the Ministries of Education, Labour and the Interior (Annex 1).

Rather than re-visiting each university to give an individual feed-back the Peer Review Team chose to bring together representatives from each university in a workshop which focused on how the universities might embed regional engagement in the process by which their institutions were managed. The workshop was developmental in character and sought to create a basis for sharing good practice between the three universities. The Team specified that participation should be restricted to ten members from each university covering the present Rectorate and Rectorate elect, central administration, Deans and Heads of Departments, students, and Centres for Continuing Education/ Training and Development, together with the

teams responsible for the self-evaluation reports. Following presentations of the overarching themes in the evaluation by members of the Review Team and individual institutional feed-back, participants were divided into functional groups (e.g. Rectors, Deans etc) to address a set of common themes and questions. These are set out in Annex 2. The conclusions from the groups were then reported back to the full workshops; these reports have played an important role in the formulation of this final report.

The Peer Review Team recommend that the Higher Education Evaluation Council organise a conference to showcase this evaluation to universities elsewhere in Finland and to the international community and that universities seeking to undertake self-evaluation of how they manage their regional role make use of the check list of questions included in Annex 2 to this report.

2 FINLAND: DEMOGRAPHY AND ENROLMENT AT THE PROVINCIAL LEVEL

2.1 General Background

As a whole, Finland covers a land area of 305,000 km². The population amounts to 5.12 million inhabitants, which makes a population density of 17 inh/km² land. After World War II with its severe problems and loss of territories in the east and north of Finland, the country has made a remarkable recovery in economic terms. Even if Finland was hit by a deep economic crisis in the late 1980's—which was heavily influenced by structural changes in the trade pattern to a great extent connected with the Russian turmoil—the economic situation grew strong in the mid 1990's. The extent of this growth in 1997 recently has been reported to surpass that of the (former) big brother Sweden. In 1995 the GNP per capita amounted to USD 20,580, which then was somewhat lower than the figures for the other Nordic countries, USA, Germany and France but higher than for Canada and Great Britain.

The national economy rests heavily on exports of forest products. The largest export commodity in 1996 was paper and paperboard (amounting to 21% of the total export value) which together with two other commodity groups (electrical machinery and mechanical constructions) accounted for a little more than 50%. Another three groups raised that figure to 66%, i.e. wood, iron & steel and ships. On the import side, the three greatest commodities in 1996 accounted for 40% of the total value, namely mechanical constructions, electrical machinery and mineral fuels & oils. The 50% limit is reached when another three groups are added, namely plastic products, iron & steel and various instruments.

Thus, exports are more concentrated on a limited number of product groups, dominated by the forest industries. In 1996, the total export value surpassed the import by FIM 44,380 million or 31% of the import. Twenty years earlier it was the other way round when imports exceeded export by 16.5%.

With respect to the most important trading partners who are also often connected with a strong cultural exchange, four countries have dominated the scene from the mid 1970's. Of these, the former Soviet Union held the strongest position, which was then as high as 25 per cent of both exports and imports. Ten years later it was down to 5% for exports and 8.5% for imports. Nowadays, the largest trading partner is Germany with 12 and 15% of the exports and imports respectively, closely followed by Sweden, the UK and USA. In 1976 the four countries mentioned here accounted in 1976 for about 60% of all Finnish foreign trade but are now down to 40%. This decrease indicates greater diversification of Finnish trade in the world market.

After the Second World War, Finland entered upon a far-reaching regionalisation policy not least in higher education. Earlier, universities were located in two cities, Helsinki (the capital) and Turku. During the period 1945–1965 another three were added either through mergers or upgrading of specialised university colleges (Tampere, Jyväskylä) or through the establishment of a quite new university (Oulu in 1958). In Eastern Finland nothing happened till about 1970 when higher education institutions were created. East Finland is here defined as the four provinces (*lääni*) of Kymi, Mikkeli, North Karelia and Kuopio (Figure 1). Of these, North Karelia was separated from a larger Kuopio province in 1960.

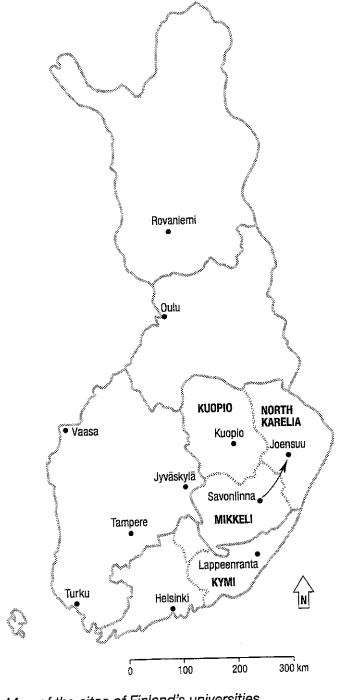


Figure 1. Map of the sites of Finland's universities

The division into four provinces lasted up to September 1, 1997 when new larger units for administration and planning were established. Since that change took place at the very end of the evaluation period, we do not need to adapt our analysis to the new administration structures.

From the beginning the intent was to establish one university in Eastern Finland. But the intense discussion about the localisation issue ended in a decision to create three higher education units, each with a special profile according to the following:

- In Kymi, what is now Lappeenranta University of Technology, enrols students from 1969.
- In North Karelia the (present) University of Joensuu specialises in teacher training, humanities, social and natural sciences as well as forestry with a branch campus for the training of teachers and translators at Savonlinna in Mikkeli province. The first students to the Joensuu units were admitted in 1969.
- In Kuopio, what is now the University of Kuopio, which mainly specialises in the medical and health areas in addition to biological, environmental and some social sciences, enrolled students from the fall of 1972.

Since both the original plan and the final decision about the three universities was aimed at serving the whole region, the evaluation of the impact of the great expansion of higher education cannot be limited to a traditional study of the universities one by one on an individual basis. Thus, an additional objective will be to try to estimate the impact on the whole region of the extended university policy. In turn, that requires a frame of reference in terms of demography and economic structure, which may also enhance an understanding of the contextual conditions for each of the universities. Consequently, we had better start with some general characteristics of the eastern region and some common enrolment issues.

2.3 Geography and Demography of the Eastern Provinces

Finland is often called the country of the thousand lakes and that is particularly true about Eastern Finland where lakes cover 19 per cent of the total area as compared with 10 per cent for all Finland. Of the eastern provinces, Mikkeli has the highest "lake density" (25%) and Kymi the smallest (16%). Eastern Finland covers 20 per cent of the country's total land area and was the home of 23.6 per cent of the population in 1960. Now (1996) it amounts to 18.9 per cent. The population size of the four eastern provinces varied in 1960 between 207 000 inh. for North Karelia and 338 000 inh. for Kymi (Table 1), which implies population densities between 11.6 and 31.5 per cent respectively for the same provinces while the national mean was 14.6 per cent. By now those figures will have fallen somewhat.

As is also shown in Table 1, only Kymi had already a relatively high (50%) share of its population living in towns in 1960. That share is now up to 68%. The urbanisation has been stronger in the other three provinces, particularly North Karelia due to much lower starting points. Both there and in Kuopio, the university towns hold a relatively strong position each with about 30% of the total population as compared with about 15% for Lappeenranta and Savonlinna.

Table 1. Basic geographic and demographic data for Eastern Finland

		Finland		Of which			
Indicator		total	East	Kymi	Mikkeli	N. Karelia	Kuopio
Area, land (1000	km²)	338	76	13	22	22	20
lakes, per cent	, ,	9.9	19.2	15.9	24.5	17.6	17.3
Population (1000)	1960	4,446	1,051	338	235	207	271
		5,132	969	331	204	176	258
Towns (per cent)	-	.,		49.7	23.8	16.8	27.0
Tomas (por corry	1996		*1	68.4	44.5	55.3	59.3
University towns				13.3	6.3 (b)	13.6	16.6
Chinal State of the State of th	1996	••	.,	17.2	14.1 (b)	28.8	33.1

- a) Indicates those who later became university towns
- b) Savonlinna branch of the University of Joensuu

The most important demographic trend needs, however, a more detailed plot of the population figures as shown in Figure 2. Since 1960 Finland has increased its population by 15 per cent, the four eastern provinces have suffered from population losses. Thus, North Karelia has lost almost as much in relative terms as Finland as a whole has gained. The total loss for Mikkeli is 12.5 per cent, while the losses for Kuopio and Kymi are less than 5 per cent.

It should be emphasized that for all provinces except Kymi, heavy losses took place during the period 1960–75. After that, North Karelia and Mikkeli have remained stable (with some further decrease in Mikkeli), while Kuopio has gained about 3 percentage points. On the other hand, Kymi increased during the early 1960's, however, since 1965 it decreased its population to the extent that by 1995, its population has a net loss of 2 per cent compared with the year 1960.

These figures indicate that the new universities had to commence their activities in an aggravated population situation in comparison with 1960. Yet, the cessation of the population losses from the mid 1970's cannot reasonably be ascribed to the small new higher education units. Nevertheless, they may have formed one contributing factor together with others behind the relative improvement of the population scene, if corresponding tendencies can be found in the more detailed analyses of the enrolments that will follow. The economic structure of the eastern provinces has changed concomitantly with the decrease in population in an almost dra-

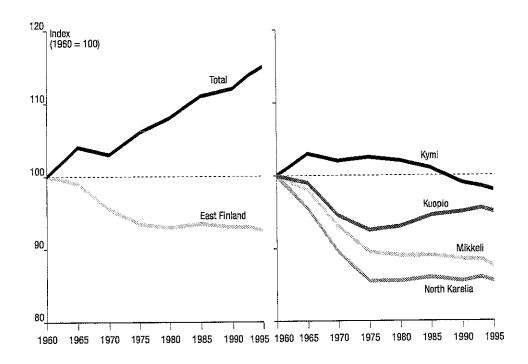


Figure 2. Population development of the East Finland provinces 1960-1995

matic way (Table 2).

First, the high figures for agriculture and forestry in 1970 have fallen from 40 to 14 per cent in North Karelia and a little less in Mikkeli and Kuopio. Second, services have increased by about 20 percentage points from 40 per cent in 1970 to close to 60 per cent in 1994. Yet, the 1994 figures may imply some small underestimation due to a minor change of the calculation base. This is because in the official statistics unknown occupations are no longer distributed proportionally over the main industry categories.

Table 2. Economic active population by main industry at the end of 1970 and 1994, %

Industry	Finland	d total	Кј	/mi	Miki	æli	N. Ka	relia	Ки	opio
	1970	1994	1970	1994	1970	1994	1970	1994	1970	1994
Agriculture and forestry	21	8	18	9	36	16	40	14	35	14
Manufacturing	35	26	39	31	26	24	21	23	26	22
Services	45	63	43	58	38	57	39	59	39	61
Total	101	97	100	98	100	97	100	96	100	97

All in all, the comparison between 1994 and 1970 means show that the four eastern provinces have followed the national mean quite well but with a somewhat lower decrease for agriculture and manufacturing. North Karelia seems to be the province that has been subject to the greatest structural change, since the loss in agriculture is the largest while there is a compensatory relative increase for services and to a lesser extent for manufacturing.

It should be underlined that wood and pulp industries hold a very strong position in Eastern Finland with reference to the national figures for trade given in the introduction. The same applies to mechanical industries as well as hydroelectric power plants, the latter particularly in the Kymi province (Imatra). Thus, the quite heavy population losses particularly for North Karelia and Mikkeli up to 1975 have been followed by a notable change of the economic structure primarily in North Karelia. That province is no longer the most agricultural one, instead, Mikkeli is.

The population changes reported above will in all probability be accompanied by changes in the size of the cohorts in the different provinces. Two examples of birth cohorts are given in Table 3. The first cohort (1958) has been chosen in order to match the first year for which there are statistics available for the matriculation from upper secondary school at the normal age of 19. An indicator that will be analysed later.

Table 3. Cohorts of live births in 1958 and 1976

	Fin	land		Oi		
Cohorts	Total	East	Kymi	Mikkeli	N. Karelia	Kuopio
Live births 1958	81,148	19,645	5,643	4,351	4,429	5,222
1976	66,848	12,654	4,442	2,597	2,172	3,443
Index (1958 = 100)	82	64	79	60	49	66

As expected, the birth cohorts in the eastern provinces have diminished much more than for Finland as a whole. Once again, North Karelia has been struck by the heaviest loss down to 49 per cent, while Kymi follows the national trend of "only" a 20 per cent decrease.

2.4 Region-Based Enrolment Trends

The localisation of the three universities to Eastern Finland was evidently based on the expectation that the enrolments to higher education should increase among people living in the four eastern provinces. Thus, any effort to assess the impact of the new universities in this basic respect has to use population figures from the provinces as the calculation base. However, the self-evaluation reports from the universities could not be expected to contain any such data. Certainly, each of them reported on the enrolments from the institutions' point of view, but for the general purpose of an evaluation in a regional perspective that is not entirely sufficient. Consequently, as a Peer Review Team we had to take an initiative of our own in order to collect parts of the supplementary information needed. In so doing, we got access to several series of manuscript tables kept by Statistics Finland.

It should also be recognised that general problems about the new regional universities' enrolments and about the labour market destinations of their graduates in the early 1980's had been subject to special analyses by a project group led by professor Ari Antikainen (see e.g. "The regional university", 1980). Since a number of follow-up studies of the graduates were included in the self-reports, we could concentrate our own analyses on the enrolments from the point of view of the provinces and the whole region.

The main objective was to be able to analyse the extent to which the establishment of the three universities had been followed by an increase of the university enrolments among people from the four provinces, not only in absolute terms but also in relation to the national mean. In other words: Did the new universities contribute to diminish the gap in the enrolments between the eastern provinces and the nation as a whole? At the same time we realised that this question to a great extent rested upon an assumption about a sufficient matriculation of school leavers as a basis for an increase of the enrolments from the provinces. An expansion at that level (in relation to the size of the corresponding birth cohorts) could then be regarded as something like a "magnet effect" of the new universities in the region.

In this connection it would carry us too far to go into details about our calculations of these effects and the methodological problems connected with them. All this will be the topic for a special report published by the Higher Education Evaluation Council. Let us here only emphasize that the outcomes of the calculation of the matriculation rates in all probability imply an underestimation of the development, because there was no baseline for the statistics by province available until 1977. In other words, about ten years after the decisions had been taken to establish universities in the eastern provinces. In addition, the difficulty to account for the internal migration among the young cohorts points in the same direction.

For Eastern Finland as a whole, our calculation of the matriculation rate (ylioppilastutkinto) shows a shrinking gap of 10 per cent for the period 1977–1995. This means that in 1995 the East was only 1 per cent lower than the national mean compared with 11 per cent below in 1977. Yet, this relative improvement represents an underestimation. There are less clear indicators of a shrinking gap, unless one takes the new polytechnics into consideration, when it comes to enrolments of new students into higher education. Here, too, we would have needed an earlier reference point than 1977.

However, such an indicator is available for census reports on the total population by educational level. In 1970, 3.1–3.4 per cent of the population in the eastern provinces had acquired an education at the tertiary level compared with 4.8 for the whole of Finland. In 1995 the corresponding levels were 9.0–10.2 and 12.3 respectively, which indicates a shrinking gap from 5 to 12 percentage points. This outcome is about the same size as for the matriculation indicator. Differences between the four provinces are further discussed in the special report.

All in all, the building up of a university system in the eastern provinces has contributed to diminish the educational gap between the region and the country as a whole or at least to keep pace with the national development after 1977. Even if nobody is able to arrive at an exact fig-

ure, as a response to the contrafactual question about what should have happened if these university investments had not taken place, our statistics-based conclusion supports the general picture painted in the self-evaluation reports that these investments have been quite vital for the development of the eastern region.

2.5 Destinations of New University Students from the Eastern Provinces

It proved to be much easier to answer the question: Where do they go, those students from the Eastern provinces who enter university in a given year? Further details are given in the special report mentioned above. However, the main outcome of our analysis year by year is easy to summarise in terms of a comparison between 1977 and 1995, since these years represent endpoints of a gradual development. The outcomes of enrolments within the home province and the other eastern provinces are presented in Figure 3.

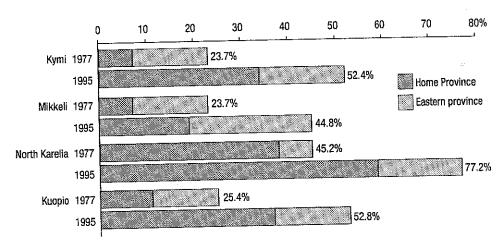


Figure 3. Per cent of all new university students originating from the eastern provinces who in 1977 and 1995 enrolled at the home province university or at universities in other eastern provinces

Figure 3 shows a great increase of the enrolments to the new university in the "home province" from 7–12 per cent in 1977 up to about 35 per cent for Kymi and Kuopio but much less for Mikkeli with its smaller range of courses offered. Instead, Mikkeli reaches a higher proportion of students who go to the other eastern destinations (25.6%) as compared with 16–18 per cent for its sister provinces. A notable exception is North Karelia, where the "home destination" (to Joensuu) is much higher (37.8%) in 1977. In 1995 the home enrolments there are as high as 59 per cent and the total eastern ones 77 per cent. This outcome should naturally be seen in relation to Joensuu's wide range of courses offered.

The great increase for "home enrolments" showed in Figure 3 should of course be balanced by decreases for other destinations. In Figure 4 it is

evident that the Helsinki area is the big looser. In 1995 it comes down below 10 per cent for North Karelia and Kuopio from an earlier level above 20 per cent. Kymi and Mikkeli students went to Helsinki much more in 1977. In both cases they have reduced their enrolments by about 50 per cent. The role of Jyväskylä and Tampere seems to be of special interest. Taken together, the decrease of the enrolments to them seems to be quite moderate, but with a relatively large drop from North Karelia which both offeres a wide variety of courses and is relatively distant from these centrally located universities.

Further, it seems quite natural that both Mikkeli and Kuopio for distance and communication reasons have relatively high transitions to Jyväskylä and, although somewhat less, to Tampere. These two universities play a clearly greater role than Helsinki for the enrolments from all eastern provinces except that for Kymi.

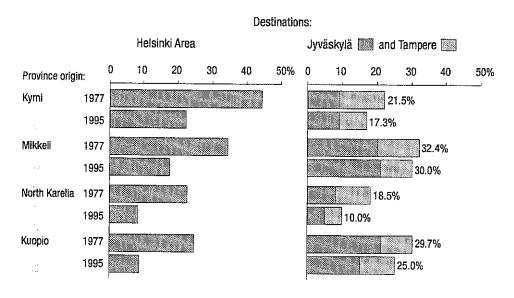


Figure 4. Per cent of all new university students originating from the eastern provinces who in 1977 and 1995 enrolled at universities in the Helsinki area (left) and at Jyväskylä and Tampere (right)

The particular patterns analysed above call for a further penetration of differences between educational training fields and gender in combination, which unfortunately cannot be done due to the lack of more detailed statistics. Considerations about the attractiveness of strategically located cultural and economic centres and time geography would make it understandable, if students from Mikkeli and Kuopio provinces who want to take up studies in fields that are not offered "at home" prefer to "go west" to more centrally located larger cities than to, so to say, turn in "the wrong direction" from their point of view to Lappeenranta and Joensuu.

All in all, the heavy structural change of the student flow means that a much greater share of all students emanating from the eastern provinces go to universities within the home province or its closest neighbours both in the east and in the west. From a geographic point of view, it might be justified to also include Jyväskylä in the vicinity areas of the Mikkeli and Kuopio provinces. If so, the 1995 figures for an in this way "extended vicinity enrolment" will turn out as follows for the four eastern provinces:

Kymi	Mikkeli	N. Karelia	Kuopio
52%	66%	77%	68%

It goes without saying that such a concentration is of great importance both from an economic and a cultural point of view. In addition, it lays a much better foundation for a policy aiming at making it possible for people educated at the tertiary level to find or create jobs in the area and to stay there as professionals. The self-evaluation reports from the eastern universities contain several pieces of information in support of such a development in recent years.

2.6 Summary and Recommendations

This chapter has shown that both geographic, economic and demographic conditions have played an important role for the development of higher education in Eastern Finland. But it has also been demonstrated that the creation of the new universities in a long-term perspective has been of vital importance for the competence building in the region. Not least that there has been a strong diversion of the flow of the provinces' new students away from the Helsinki area in favour of the eastern "home region".

Both in order to evaluate and to understand the importance of higher education facilities for the area, it is necessary to collect statistics and other kinds of information in a regional perspective and to use population figures for the provinces as the calculation base. Moreover, good planning does also require appropriate information about preferences and needs among different target groups with respect to gender, age and study situation.

The recommendations given above are in the first place directed towards the central level of planning in the Ministry of Education and the Higher Education Evaluation Council itself. But it should also be a matter of consideration for the regional universities, particularly if—which we think they should—they are going to strengthen their co-operation in order to arrive at a pattern of programme offerings that at the same time combines increased accessibility over the whole region with high quality features for teaching and learning.

Moreover, instead of a mere delivery of descriptive statistics about student numbers enrolled and examined within the institution, more efforts should be spent by each university on an analysis of the student flow through the programmes, including factors behind drop-outs and passrates among different student groups.

3.1 The Eastern Finland Universities Within the Finnish University System

In the sixties and seventies, the aim was to offer university education for one fifth of the age group and to extend the institutional network to eastern and northern parts of the country. The first step in developing the Finnish territorial university system was taken when the University of Oulu was founded in 1958 for the needs of Northern Finland.

For the present, the Finnish university system comprises twenty institutions. Ten of them are multi-faculty universities—including University of Joensuu (UJo) and University of Kuopio (UKu). There are four art academies, three schools of economics and business administration, and three universities of technology. Lappeenranta University of Technology (LUT) is classified here as a technical university although since 1991 it has also run a business school. The annual intake of the universities in 1997 was about 18,500, which represents more than one quarter of the age group. The total number of degree students was 140,000. The numbers of degrees conferred in 1997 were 16,000 (all degrees), 11,000 (master's degrees) and 900 (doctor's degrees). The personnel consisted of 7,700 teachers—out of which 2,100 were professors—and of 17,500 other staff (as full-time equivalents). The universities were run on a FIM 5,300 million budget and FIM 2,400 million external funding.

Table 4 presents the development of some basic figures (number of students, degrees conferred, personnel and funding) of the Eastern Finland universities over ten years periods. The first year in the Table is, however, the initial year 1981 of the KOTA database (university sector statistics). In addition to individual universities, the figures for "Eastern Finland university total" and University of Oulu are presented. It is interesting to notice that the three universities in Eastern Finland, when taken together, and University of Oulu have attained an equal share of ten per cent from the university capacity in Finland. The policy of three separate universities has thus managed to equip Eastern Finland with university resources equal to University of Oulu. To set this in the context of the regional impact of the universities, it would be interesting to compare these different policies adopted. The review would be of special interest because the regional role of the University of Oulu is commonly seen as a benchmark in Finnish higher education.

Table 4. Descriptive data on Eastern Finland universities and University of Oulu from 1981 to 1997

Year	Uni- versity	Number of students	Share of univ. total (%)	All degrees conferred	Share of univ. total (%)	Doctor's degrees conferred	Share of univ. total (%)
 1981	UJo	3,349	4.0	564	5.1	2	0.6
1301	UKu	1,584	1.9	240	2.2	7	2.2
	LUT	1,124	1.3	54	0.5	0	0.0
	EF total	6,057	7.2	858	7.8	9	2.8
	UOulu	7,103	8.4	1,085	9.9	44	13.6
1987	UJo	4,214	4.3	379	3.9	8	2.2
1507	UKu	2,620	2.7	283	2.9	25	6.8
	LUT	1,707	1.7	139	1.4	0	0.0
	EF total	8,541	8.7	801	8.2	33	9.0
	UOulu	8,392	8.6	916	9.4	39	10.6
1997	UJo	6,129	4.3	758	4.7	31	3.3
1991	UKu	4,287	3.0	621	3.8	58	6.2
	LUT	3,803	2.7	317	2.0	10	1.1
	EF total	14,219	10.0	1,696	10.5	99	10.6
	UOulu	12,641	8.9	1,457	9.0	108	11.6
Year Year	Uni-	Number of	Share of	f Number of		_	Share of
	versity	teachers	univ. tota		univ. total		univ. tota
			(%)	staff	(%)	in FIM mill.	(%)
1981	UJo	276	4.2	243	3.3	35	3.1
	UKu	212	3.3	306	4.1	38	3.3
	LUT	98	1.5	108	1.5	15	1.3
	EF total	586	9.0	657	8.9	88	7.7
	UOulu	699	10.7	1,011	13.7	123	10.8
1987	UJo	336	4.5	433	3.8	7 7	3.6
	UKu	285	3.8	499	4.3	78	3.6
	LUT	151	2.0	181	1.6	37	1.7
	EF total	772	10.3	1,113	9.7	192	8.9
	UOulu	827	11.0	1,333	11.6	227	10.5
1997	UJo	348	4.5	753	4.3	239	4.5
	UKu	310	4.0	838	4.8	217	4.1
	LUT	193	2.5	336	1.9	127	2.4
			11.0	1,927	11.0	583	10.9
	EF total	851	11.0	1,027			

The national degree regulations define the objectives, extent and overall structure of degrees. Within the framework of these regulations, the universities decide on the contents and structure of their degrees in more detail. Most importantly, the fields of study represented in each individual university are agreed in a contract between the Ministry of Education and the university.

Table 5 presents the fields of study of the three Eastern Finland universities by broad subject groups. The most important fields not represented in any of the universities are Law, Sport Sciences, Dentistry (from 1998 onwards), Veterinary Medicine and all fields of Arts.

Table 5. Development of the fields of study by universities

Field of study	University of Joensuu	University of Kuopio	Lappeenranta University of Technology
Theology	1988	-	-
Humanities	1969	-	-
Social Sciences	1972	1984	•
Business Administration	-	-	1991
Psychology	1969	-	-
Education	1969	-	-
Natural Sciences	1969	1972	-
(Agriculture and)			
Forestry	1982	· _ ·	-
Engineering	-	_	1969
Medicine	-	1972	-
Dentistry	-	1973–1998	-
Health Care	-	1979	_
Pharmacy	-	1973	-

3.2 The Changing Funding Method and its Influence on Profiles

The funding mechanism of the Finnish universities has undergone massive changes since the middle of the 1980's. This is equally true as to the sources of income as well as to the processes of resource allocation within the universities. Although the changes are common to all universities in Finland their effects are more crucial to young and still developing regional universities—such as the three universities in Eastern Finland—than to the more established universities.

Until 1986, the financial management of the universities was quite straightforward, inflexible and strictly steered by the government. The universities were practically run by budget funding alone. Fund allocation to universities was based on political judgement, and no clear criteria besides student volumes and status quo of funds were applied. The budgetary funds were divided into several (ca. 15) earmarked categories, and the allocations had to be used during the budget year. There were not too many degrees of freedom left for decisions to allocate resources within a university.

In years 1987-91, the universities experienced an intensive increase in their budget funding. At the same time, the number of the budget categories was radically reduced, the funds became transferable over the budget year, and the role of the external funding started to increase. As a consequence of this, the universities had now at their disposal an ever-increasing amount of "free" money, which they could allocate quite independently. For the universities in Eastern Finland particularly, this period was crucial in their development from training institutions of professionals (engineers by LUT, teachers by UJo, physicians and dentists by UKu) towards modern high-quality institutions of higher education and research.

During the deep recession period of the Finnish economy in 1992-94, the universities had to face a drastic reduction, close to 20 per cent in real terms, in their budget funding. Although the budget practices were simultaneously further deliberated, e.g. the funds were allocated to the universities as a lump sum, the universities were driven into financial difficulties. To be able to maintain the basic standards of their activities (e.g. to continue the existing degree programmes), the universities had to reduce the developmental free money, make heavy cuts in library and equipment allocation, etc. The most dramatic action in this period was the governmental decision to discontinue the dentist education at the University of Kuopio in 1998. On the other hand, the recession forced the universities to be even more active in their efforts to gain funding from external sources. The most noteworthy example from that point of view is the successful effort to start education in business administration in Lappeenranta University of Technology by means of considerable local and regional funding.

Since 1995 the budget funding has remained quite stable in real terms. The budgeting of core expenditures has began to shift towards a formulabased funding, based on cost-weighted targets for master's and doctor's degrees. An increasing amount of budget funding is allocated to strictly defined purposes and development programmes in an earmarked form. Therefore, flexibility created by the introduction of lump sum budgeting is substantially reduced by this earmarking. For the young Eastern Finland universities, having not yet any "old and dry branches" in their scientific trees, this means decreased financial autonomy under the pressure of fixed expenditures. This being the state of affairs, the external funding-nationally and internationally competitive as well as regional—is becoming more and more important as a source of income for the universities. The external funding of the three universities has been on increase and its share out of the total budget varied in 1996 from 26 per cent (UJo) to 33 per cent (UKu). In view of the Peer Review Team, these figures form a satisfactory basis for a systematic development of diversified external income acquisition.

When defining its mission and selecting its strategies for achieving that mission a regional university has to balance between two main objectives: to establish a traditional academic reputation nationally and internationally, and to make initiatives as well as to actively participate in regional development processes. All of the three universities have encompassed both these needs in their strategies, and they have executed their double roles with at least moderate success. However, the choice of a strat-

egy and the profile development consequent upon that are always to a great extent a financial question. We will give here some examples to discuss this question.

The main idea at Lappeenranta University of Technology has, since its beginning, been the combination of engineering and management education. A decisive step in reformulating LUT's profile was taken in 1991 when pure business studies were launched at the (former technical) university. This is a brilliant example of the development of a university where both the strategic objectives of the university and the needs and expectations of the region have come together. A substantial financial support from the city and a local foundation FIM 18 million to cover the special expenses of the new course for the first five years and FIM 25 million for the temporary financing of new accommodation—was needed to make it possible for the partners to achieve the common goal.

The governmental decision to close the department of dentistry at the University of Kuopio has its origin in the recession of the Finnish economy, albeit the action has been marketed mainly as a measure of structural development of the Finnish university system. To compensate for this discontinued education, the university was allowed new budget funding for fortifying its strengths especially in biotechnology and related topics. From the point of view of the university's strategy this decision may have, at least in the short run, effects to shift the profile of the university towards an academic research institute at the expense of regional health care efforts. On the other hand, the new programmes introduced also offer innovative opportunities for regional development in the form of technology transfer and in the long run creation of local high-tech spin-off enterprise.

The high unemployment rates in Eastern Finland have raised strong demand from the side of the authorities and employers in the region for entrepreneurial and management programmes. As stated above, LUT has succeeded, with the strong local support, to respond to this demand. The two other universities have to find solutions of their own. They have already made attempts to include entrepreneurial and management courses in their existing programmes in different fields. These courses are typically financed by donations from local and regional sources. With regard to the resources available to the universities, the Team are in support of this strategy. Unfortunately, during the site visits the Team got the impression that the staff of the universities were not unanimously committed to the launch of this concept. This being the case, there exists, under the pressure of economic realities a danger that the programmes may dry to miniature size degree programmes for a handful of participants without benefiting the vast majority of the students. The Team also believe that both interuniversity and increased university-polytechnic collaboration in this area would considerably benefit the people and enterprises in the whole of Eastern Finland.

3.3 The Role and Funding of the Open University and Continuing Education

In addition to undergraduate degree programmes and postgraduate education the universities run courses and programmes in adult education. These include both Open University teaching and Continuing Professional Development. The Centres of Continuing Education/Centres for Training and Development are responsible for this education.

The Open University activities are typically budget funded in the form of earmarked allocations. The Open University offers the adult population, irrespective of where they live and regardless of their educational background, an opportunity to study either separate courses or larger blocks of the basic degree curriculum of universities. After having completed approximately one third of the degree programme, students have the option of entering university as regular students. The route has not been utilised very much thus far, but its popularity is increasing.

The form and objectives of professional continuing education vary widely, depending on the target group and subject range aimed at. Two main types can be distinguished:

- <u>Short courses, seminars and congresses</u>. These are designed to disseminate new information and provide producers of information and experts with opportunities to meet.
- Long-term courses and programmes. The purpose of this education is often occupational specialisation or specific qualification. In the training programmes especially, face-to-face teaching periods alternate with on-the-job training. Fixed-form, controlled programmes, such as MBA and PD programmes, play an ever-increasing role in this education.

The professional continuing education has to be provided at cost to the end user. Continuing education accounts for some 70 per cent of the budget of these centres. Teaching expertise is purchased both within the university and from outside.

Both Open University and professional continuing education have experienced a tremendous growth in the nineties. The number of students in the Open University has increased from 26,500 in 1987 to 77,600 (corresponding 19,300 FTE students and nearly 300,000 credits) in 1997 (source: KOTA database). In continuing education, the number of courses has increased from 1,200 to 4,900.

In the case of the Eastern Finland universities, the absolute figures and shares of Open University students, their FTE's, credits passed, number of continuing education courses and number of continuing education students in 1997 are shown in Table 6.

Table 6. Open University and continuing education activities

	Students	FTE	Credits	Nr. of cont. ed. courses	Nr. of cont. ed. students
University of Joensuu	3,100	700	15,000	219	5,500
	(4.2%)	(3.8%)	(5.1%)	(4.5%)	(4.5%)
University of Kuopio	3,392	881	17,145	111	2,715
	(4.6%)	(4.7%)	(5.9%)	(2.3%)	(2.2%)
Lappeenranta University	221	37	700	103	2,926
of Technology	(0.3%)	(0.2%)	(0.2%)	(2.1%)	(2.4%)

Generally speaking, the figures observed correspond rather well with the overall volumes of the universities. However, the University of Kuopio seems to be quite active in its Open University education whereas the role of Open University in LUT is only marginal.

During the site visits the Team experienced that there is no common systematic in the operations or in the funding arrangements between the departments and the centres. For example, some clear problems seem even to exist when the centres organise, quite independently of the departments, courses for the departments' degree programmes (the Team noticed complaints concerning lectures in the evenings and the quality of some imported courses). The teachers and other experts from the departments participate in the programmes of the centres mainly as individuals, only in a few cases the departments are involved. The Team recommend that systematic contracting—covering both the use of the human resources and the financial arrangements—between the departments and the centres should be established.

3.4 New Regional Challenges for Universities: The Establishment of the Non-University Sector

Finland is gradually building up a non-university sector of higher education consisting of polytechnics. They are formed by upgrading the specialised institutions, which previously offered vocational higher education, and by merging them to form new, multi-field institutions. The reform was launched with the enactment of legislation on experimental polytechnics in 1991. Twenty-two temporary polytechnics were established under the Act. The first nine polytechnics got their permanent status in autumn 1996. In 1998 there are 20 permanent and 12 temporary polytechnics. The reform is to be completed by the year 2000. The goal is to provide student places in higher education for 60–65% of the age group (40,000) and for 13,500 adult students. Polytechnics will admit about 32,000 and universities some 20,000 new students annually.

There are five polytechnics in traditional Eastern Finland (in the four old provinces of North Karelia, Kuopio, Mikkeli and Kymi). Table 7 presents the institutions and their fields of study.

Table 7. Eastern Finland polytechnics and their fields of study

Institution	Pohjois- Karjala Polytechnic	Etelä- Karjala Polytechnic	Kymen- laakso Polytechnic	Mikkeli Polytechnic	Pohjois- Savo Polytechnic
Founded/Status	'91/perm. '96	'92/temp.	'92/temp.	'91/perm. '97	'91/perm. '98
Fields of study					
Natural resources	•	-	•	•	-
Techn, and transport	•	•	•	•	•
Admin, and commerce	•	•	•	•	•
Hotel and rest.; home and					
instit, economics	•	•	-	-	_
Soc. serv.; health care	•	•	•	-	•
Culture	•		•	-	•

The goals set for the non-university sector in higher education reform are quite ambitious. The main objectives include ("Higher Education Policy in Finland", Ministry of Education, Helsinki 1996):

- To raise the standard of education.
- To react to changing needs for expertise and skills.
- To make vocational education more attractive.
- To improve the international compatibility of vocational education.
- To make the vocational education system more functional.
- To decentralise the administration of vocational education.
- To reinforce the regional impact of vocational education.

It is clear from the objectives set that the polytechnics will provide real challenges to the universities. There are some additional factors, which make them particularly able to compete with universities especially in regional issues. First, the institutions are owned by municipalities, by coalitions of municipalities, or by local and/or professional foundations. The institutions are financed by state budget funds and contributions by the students' home municipalities, but the final decision on funding is made by the owner, i.e. on local or regional political basis. Second, the general administration of the institutions is handled by the Board whose majority in most cases consists of local and regional politicians. Therefore, the commitment of the decision-makers of the polytechnics to regional issues is in general much stronger than is the state of affairs in universities.

There is another special feature in the funding of the polytechnics worth noting. The budget funding of universities is increasingly based on performance criteria, i.e. on the output of the universities. The funding of the polytechnics, on the contrary, depends solely on their enrolment, i.e.

on the input side. It is the view of the Peer Review Team that both the university and non-university sector should be treated with uniform principles. Budgeting by results as a part of the steering system should be applied throughout the whole higher education system.

To conclude, it is our view that the universities should not neglect the polytechnics but see them, more than they do at present, as partners and regional collaborators. In a recent workshop ("Assessing Regional Influence of Higher Education", FINHEEC workshop seminar on 18–19 May 1998 in Tampere) some of the Team members noticed that there exists a lot of innovative enthusiasm and effort among the polytechnics in developing their institutions to respond to the needs of their corresponding regions.

3.5 New University Act and its Possibilities for Greater Autonomy in the Management of the Institutions

The organisation and structures of the three universities are rather traditional. The new more autonomous circumstances created by the new university act are not bringing along any radical changes in the universities. New university act provides, for example, possibility for representation of the external stakeholders in the Senate of the university and possibility for inviting the rector from outside the university. The University of Joensuu seems to be the most innovative in implementing these opportunities. The Senate of the University has two representatives of the regional stakeholders (the cities of Joensuu and Savonlinna) and it has been defined by the University's internal act a formal role for the senior management team of the university-rectors, head of administration, deans, etc. All in all, however, the Team noticed no statutory barriers for arranging the functions of the universities. Where "bottlenecks" were found, it was more a question of a vague implementation of the procedures and lack of uniform practices in different units.

The Team experienced that the financial monitoring of interdisciplinary research groups and projects needs to be redefined. Too often it seemed to be unclear even to the department heads and project leaders which were the sources of the funding, who has the main responsibility for the use of the money, what organisational position the group members have, how the overhead costs are handled, etc. On the other hand, the Team were impressed in reviewing some high quality, productive and also financially well-organised groups and units (e.g. the multi-disciplinary research groups in the A.I.V. -Institute at UKu, the Department of Chemistry at UJo). In an era when the functions of a university are more and more programme or project-based, firm and clear-cut monitoring of the projects is of paramount importance for the whole financial system of a university.

As already noted, the universities have succeeded reasonably well in increasing the proportion of their external funding. However, the Team got the impression that the income generation has been based more on individual activity than on systematic steering and co-ordination by the

university. The very central role of the rectors in developing especially the local and regional funding must be noticed in this connection. In order to be successful in the future, the universities need more co-ordination in applications in their income generation, proper pricing of projects and contracts (including a balanced determining and clear-cut monitoring of their overhead costs), uniform channelling of the funds through the university's financial system, and last but not least, result-based and incentive allocation of the funds to the units. For local and regional funding agencies in particular, the universities should have established channels to discuss and negotiate about projects and development programmes of common interest.

At present the basic budget funding of universities is increasingly based on performance criteria, i.e. on cost-weighted targets for master's and doctor's degrees which are likely to be supplemented with some research indicators in a near future. The Team have the view that it is time for the universities to start developing more documentary and result-oriented internal fund allocation procedures.

There is one special issue among the internal fund allocation processes that we want to discuss here more closely. It is the decentralised allocation of resources for purchasing literature, i.e. scientific monographs, periodicals and textbooks, to the university libraries.

The libraries of the Eastern Finland universities are the only scientific libraries in the region. Their users are not only the universities themselves but other teaching institutions (e.g. the polytechnics), local industry and public administration as well. The libraries, though they are open for public use, are funded solely by the universities, principally by their budget funding.

The national figures show that library allocations (more precisely, money used for purchasing different types of literature) in 1997 are in real terms less than half of the allocations in 1990. Their share of the universities' budget appropriations has decreased from 2.8 per cent in 1986 to 1.5 per cent in 1996 (to 1.1 per cent if the total funds are the basis). From 1988 onwards, when the internal fund allocation has been based on the universities' own decisions, the nominal increase in the library allocation has clearly become lower (and was negative during the years of recession in 1993–95). The situation is at its worst with respect to research monographs and scientific journals.

The figures above are national but they are also descriptive for the Eastern Finland university libraries. The Team see this situation as a clear threat for proper teaching and research premises. Access to electronic periodicals and databases can, of course, give at least some assistance to the problem, but it can not be the only solution. The problem is nation-wide and so severe that the universities can not solve it alone. What the Eastern Finland university libraries on the other hand could do, is to increase collaboration and division of labour between their three libraries as well as to collaborate with the as yet modest but developing polytechnics libraries in the region.

3.6 Summary and Recommendations

The different sections of this Chapter contain several recommendations for the universities. Instead of repeating them here, we summarise our discussions by bringing up two recommendations to the Ministry of Education.

First, we recommend that the new system of using performance indicators in the funding of the universities be introduced to polytechnics as well. Budgeting by results as a part of the steering system should be applied throughout the whole higher education system. It is clear that the criteria for polytechnics may differ from those of the universities. Further, it should be considered whether indicators based on regional impact of the institutions could be developed and added to the set of performance criteria (both for universities and polytechnics).

Second, the development of the library allocations of the universities has led to a situation that is a clear threat for proper teaching and research. We recommend that the Ministry undertake a review of the present state of affairs in university (and polytechnics) libraries and adopts the appropriate measures thereon.

4 THE ACADEMIC PROFILE OF THE UNIVERSITIES AND THE ECONOMIC DEVELOPMENT OF EASTERN FINLAND

4.1 Introduction

In this Chapter we review the evolving academic profile of the three universities in relation to the economic development needs of Eastern Finland. By "profile" we mean the mix of subjects taught and researched in each institution and the extent to which this has been explicitly linked to the human resource and technological development needs of the economy and society of the area. The chapter draws upon the self-evaluation reports, meetings with staff and students and external stakeholders and discussions/responses around a set of questions sent to central government officials (Annex 1).

The decision to establish three universities <u>in</u> Eastern Finland each with a different academic profile, rather than a single university of Eastern Finland, launched the institutions on separate development trajectories. To varying degrees each of the universities has stuck to its initial profile, seeking to establish national and international reputations in these fields. There has been some diversification, notably at the University of Joensuu, but in general the universities have built upon established strengths (e.g. Energy Technology at LUT). Long periods of leadership by one rector together with relatively stable staffing has ensured that there has been limited drift away from the basic components of the original foundations. In short, there has been a high degree of path dependency in the evolution of the universities.

A key question faced by the Peer Review Team was the extent to which this pattern of evolution has also succeeded in meeting the development needs of Eastern Finland. We concluded that to establish itself each university had no alternative but to create a reputation nationally and internationally, even if this meant paying limited regard to the needs of the region. Funded growth has been driven by national needs for graduates in fields such as medicine, engineering and teaching. Given the generous state support (by international standards) and the limited local catchment area of each university, students have been able to live away from home and this has enabled each university to recruit in a national pool and attract students from outside of Eastern Finland. Additional funding for research from the Academy of Finland has been based on identifying excellence wherever it has been located. Insofar as the Ministry of Education has encouraged inter-institutional co-operation it has been by subject area (for example inter-institutional graduate schools). Even initiatives such as the Centres for Expertise programme, although located in different universities around the country, have been national in character.

The Peer Review Team concluded that this development trajectory has clearly had positive impacts on the three <u>cities</u> of Joensuu, Kuopio and Lappeenranta. The universities have brought new employment to areas of high unemployment. Students from outside of each city have brought additional income; employers from outside of the area have been attracted to science parks to recruit these students; there have been some spin-off of new enterprises; and there have been some benefits in terms of research and teaching links for a few local enterprises.

Last but not least there have been cultural benefits through the provision of audiences for arts and sports and contributions to local civil society—although the extent of this does seem to vary from city to city.

Our discussions with local stakeholders indicated that these benefits have been much appreciated. Indeed each municipality has become a major investor in their local university through the provision of accommodation and in one instance equipment. The universities are clearly seen as "putting the city on the map" nationally and internationally. This is most graphically illustrated by the marketing of Kuopio where the university features in virtually every page of the city's brochure, which has the title "Kuopio: open to new ideas".

Having noted this the Peer Review Team were forced to conclude that the three cities do not constitute the whole of Eastern Finland. There are significant settlements elsewhere in the region. There are economic, social and cultural development needs and opportunities, which remain to be addressed. For example, Eastern Finland still has unemployment significantly above the national average; the industrial structure is still dominated by relatively stable or declining sectors; large enterprises remain dominant and there is not a strong tradition of local entrepreneurship; the health of the population is still below the national average; and levels of educational attainment and the skills of the workforce leave much to be desired.

4.3 Future Opportunities

Given this situation, the Team asked themselves: Having established their reputations, were the universities well placed to now respond to these regional needs? More specifically, by adjusting existing teaching and research programmes and introducing new programmes, could they, individually and collectively, now become more regionally as well as nationally responsive institutions? Much of our report is concerned with mechanisms that the universities have in place and could develop to achieve this responsiveness. Here we discuss the more general questions of the overall academic profile of the institutions. We set this in the context of national policy, since this provides a framework of opportunities and constraints for each institution.

The opportunities for Eastern Finland in terms of links with Russia

provide a starting point for considering this issue. Each of the universities has identified this as an opportunity. For example LUT has appointed an Economics Professor specialising in Russia and the transitional economies; it has also identified Russian knowledge co-operation as a theme within its specialist areas of technology management, logistics and energy and environmental technology. Joensuu has an East-West innovation centre and provides training in Russian languages for SMEs doing business in that country; it also provides training for expert interpreters in Russian. Having said this there appears to be no collaboration between the universities and between each of the regional councils in Eastern Finland drawing the universities together in an overall development programme to address these opportunities.

Part of the explanation for this situation may lie in the tension between regional and national interests. Clearly doing business with Russia is a national as well as a regional opportunity. There are sources of expertise outside of the universities of Eastern Finland. For example, Joensuu collaborates with the University of Oulu in its training programme on Russian know-how. There is also specialist expertise in transitional economies in Turku University.

Another example is the application of information and communications technology to meet business and community needs within the region. Two of the universities have development projects—the Karelian Information Society Project at LUT and the Research and Development Centre for Information Technology in Education at Joensuu. The Centres of Continuing Education/for Training and Development in each university experience strong regional demand for courses in this field, which cannot be met within the university. Notwithstanding the importance of such initiatives to raising skills in Eastern Finland to the national level, the Team found little evidence of co-ordinated approaches across the three universities. The principal priority seems to be to win extra funds for specialist computer science graduates to meet national demand.

A third example is in the field of links with schools and lifelong learning. Raising educational attainment in schools and beyond is clearly a priority for the whole of Eastern Finland. One way of reaching schools is via graduates teaching in local schools and students attending the local university. Although all of the universities make some attempt to recruit students from Eastern Finland, this was not a particular priority, especially in subjects where the university was operating in selection rather than recruitment mode. Links with schools were narrowly defined—the power of teaching as a regional development tool was not fully appreciated. In terms of lifelong learning and Continuing Professional Development the three centres of continuing education seemed somewhat detached from their parent university. The Team did not identify strong links between them.

The next example would be in the area of health studies. There is a widespread international recognition that social, economic and cultural considerations as well as the purely medical influence the health of a population. To establish its international and national reputation, University of

Kuopio has quite properly focused on bioscience. Diversification has been in specialist areas such as environmental health, which builds on the initial advantage and where the university can capture a national and international niche. The university has not developed the social and management sciences relevant to broader issues of health and its delivery. However, there is growing collaboration with Joensuu, which has the expertise in social policy and education.

The final example is management studies. This is an area where all three universities have experienced demand from employers and students for additional skills. This is a particularly strong regional demand, giving the need to raise management competency in SMEs in Eastern Finland. In keeping with their original foundations, all three universities are, quite sensibly in the view of the Team, attempting to focus management development on their existing programmes. But this does serve to reinforce the initial profiles with some of the consequences noted above. As a result there appears to have been no discussion as to the possibilities of interuniversity collaboration, for example to build a multi-site business school for Eastern Finland. The Team also did not see evidence of systematic collaboration with the polytechnics in the creation of pathways in management education from lower to higher levels.

Having raised these questions the Team is well aware that attempts to shift the profile of the three universities towards activities that might better meet regional needs could run counter to national policy. The new universities act gives greater autonomy to the individual institutions and governmental pressure to change the profile might be seen as undermining that autonomy. National funds for research are also being increasingly awarded on a competitive basis judged by merit rather than the long-term development needs of particular institutions or regions. The establishment of the polytechnics with strong regional roots could also provide a justification for the universities avoiding regional engagement and other stakeholders looking to these institutions for support. Indeed the general absence of dialogue with polytechnics was a worrying aspect of our review.

Outside of higher education, while regional funds are increasingly available, regional mechanisms for resource allocations are as yet poorly developed. The regional councils are new, indirectly elected bodies; their chief resources are derived from the EU and there is uncertainty as to the future availability of these funds. Regional offices of central government have only just been established but the Ministry of Education is not represented. So it is within these constraints that the mechanisms for responding to regional needs in each university will have to be judged.

4.4 Summary and Recommendations

While the universities in Eastern Finland were established as a conscious act of national policy to foster more even regional development, the Review Team found it difficult to identify a strong current commitment to this agenda. More particularly we feel that the universities, whilst owing their foundation to regionalism, are now having to function in what might be termed a policy vacuum with regard to this aspect of their operation. The absence of a clear policy for the territorial development of higher education is particularly apparent in relation to the competition between the three universities, the polytechnics and extension programmes of the University of Helsinki in cities in Eastern Finland such as Mikkeli where the universities of Joensuu, Kuopio and Lappeenranta do not have sites. To fill this policy vacuum the Peer Review Team recommend that the government undertake a review of the role of higher education in regional development across the whole of Finland. The review should be an interdepartmental exercise involving the Ministries of Education, Labour, Industry and the Interior, the regional councils and of course the universities and the polytechnics.

5 INSTITUTIONAL MANAGEMENT: REGIONALLY RESPONSIVE UNIVERSITIES?

5.1 Introduction

This Chapter focuses on the question posed earlier: Having established their reputations do the universities in Eastern Finland have in place the structures and management processes to respond to regional needs? This is an important question as the universities move away from a traditional model of funding and accountability based solely on links with the Ministry of Education and need to engage with the agendas of local and regional agencies such chambers of commerce, municipalities and regional councils, local labour market agencies and other parts of the educational system (schools, polytechnics, private suppliers). Whilst it was not the task of the Peer Review Team to enquire into the overall quality of institutional management it became clear that efficient and effective management processes were a necessary condition for successful regional engagement.

In our view the initial self-evaluation reports did not adequately address questions of institutional management in sufficient detail. Following our site visits, the Team sent a supplementary questionnaire to all institutions (Annex 2). This chapter draws on these responses and the workshop convened with representatives of all three universities in Savonlinna in May 1998 to discuss questions of institutional management and regional engagement.

5.2 Strategic Planning

The Review Team sought information on how regional engagement figured in the strategic planning processes of the universities. Not surprisingly, we found that strategic planning is still dominated by the dialogue with the Ministry of Education and focuses on the three-year performance agreement. This means that the most important goals are the annual numbers of basic and doctoral degrees to be awarded in each subject area. Development programmes and projects of national importance and their funding are also agreed in these contracts.

We were surprised to find that in the tasks agreed with between the universities and the Ministry of Education there appears to be no specific reference to Eastern Finland. For example the task of the University of Kuopio is stated to be:

A multidisciplinary university orientated towards health and the environmental sciences with the task of raising the levels of knowledge and education by means of internationally comparable high quality research and instruction based thereon, in order to improve the quality of life and welfare in Finland.

(Source: "Target agreement between the University of Kuopio and the Ministry of Education for the period 1998–2000")

However, in statements in the agreement on structural development the Ministry makes reference to co-operation with other universities, which seem to only incidentally include other universities in Eastern Finland. For example, Kuopio "will assume responsibility in social work in Eastern Finland on the basis of a plan agreed in co-operation with the University of Joensuu" and in travel and tourism studies with the Savonlinna unit of the University of Joensuu. These cases are set alongside collaboration with University of Oulu, Turku School of Economics, University of Helsinki, Helsinki School of Economics and Business Administration, and the Swedish School of Economics and Business Administration. In short, we found little evidence of strategic planning for a university of Eastern Finland.

Within each university procedures are in place for the engagement of each level in the institutions (Heads of Departments, Deans and the Rectorate) in the planning process. In all institutions the role of the Dean seems ambivalent, given that it is not a resource allocating position. More significantly, there appears to be no incentive and fewer mechanisms to explicitly introduce regional considerations into the exercise, as there is no obvious budget line. The exception to this would appear to be the plans for the Centres of Continuing Education and Training. Moreover, the planning process seems to be largely internal to the universities – the Administrative Councils and lower level governance bodies contain no external representatives through whom regional priorities could be channelled. Again the Boards of the above mentioned Centres for Development appear to be an exception.

A particular feature of the hierarchical planning process is that it appears to be very disciplinary-based, whereas many regional opportunities require interdisciplinary teaching and research. New opportunities can be addressed but would seem to require departmental regroupings. (The new cross-departmental Degree programme in Electrical Engineering in LUT would appear to be an exception in this regard.) The universities recognise the need for strategic funds to support new initiatives; but with so much of their resource tied up in meeting existing staff costs, a system of performance funding based on the number of graduates, and limited surpluses created from contract research, the scope for action is limited. It is significant that one of the most important new initiatives established across the three universities, the School of Business Administration at LUT was funded by "regional" external sources (the Vyborg Economic Society endowment) and has not involved internal resources. While small sums of money are available for development projects, these seem to be largely at the discretion of the rectors, making the pursuit of a regional agenda highly dependent on their leadership and commitment. As the requirement for matched funding for external projects in the region increase this could prove to be an unsatisfactory arrangement.

We were also concerned about the seeming lack of ownership of the strategic planning process by the universities as a whole. The contracting system and performance reporting seems to be an overly formalised and bureaucratic process with limited engagement of the academic staff and

the wider regional community in an active dialogue. As a general rule, statistics are reported to administrators and not used to guide the planning process and monitor progress against plan throughout the institution, particularly in relation to front line teaching and research activities. In short, the universities need to be given more freedom in plan preparation and at the same time develop their skills in the planning process itself.

5.3 Financial Management

The Peer Review Team formed the view that the system of financial management to support an entrepreneurial engagement was only just beginning to be developed within the universities. In part this could be attributed to past national policies. However, the new universities act does give freedom to the universities and our workshop in Savonlinna indicated a desire for new practices.

At the heart of the financial management problem is a failure on the part of the universities to charge adequately for a contribution to their core infrastructure in relation to their externally funded activities. If the universities are to subsidise particular services to industry, commerce and cultural life within the region then the scale of these subsidies need to be measured and a re-charge made to the appropriate public funds allocated by central, regional or local government. To identify any hidden cross subsidies requires a more sophisticated system of accounting than seems to be present in any of the universities. If, after charging their full costs and a proper contribution to institutional overheads, departments make a surplus, they should be allowed to retain these and invest them in the development of future research and teaching. Only by realistic pricing of teaching and research services will the universities create sufficient headroom to both respond to and shape the development of the region.

5.4 Student Management

In Chapter 2 we noted the important role of the universities in raising participation in higher education amongst the resident population of Eastern Finland. In this section we review the processes that the universities have in place to maintain this progress and also to ensure that as many graduates as possible enter into employment within the region thereby contributing to raising the skills levels of those working in the area.

In the case of undergraduates, the PRT formed the impression that no particular priority was allocated to regional recruitment in any of the universities. In fields where there is strong competition for students, especially in Science and Engineering, the priority is to attract students from throughout the country. (However, in Kuopio we noted an example of close working with local schools to raise interest in science. The Kuopio Student Affairs Office also claims to be active in recruitment amongst schools in the North Savo region and in the city of Lappeenranta.) In areas where they are distinctive (e.g. forestry) the universities are also meeting

national needs and must recruit accordingly. The three universities do jointly publish an annual recruitment magazine (*Trilogi*) but this was not actively promoted to us as an example of joint regional working. In summary, and to quote from the Joensuu further evidence "competition among universities for bright students is increasing and consequently recruitment activities are becoming more national".

What of non-traditional recruitment? Clearly students recruited from Open University programmes are local; however, the University of Joensuu admits to not meeting the ambitious targets set by itself (last year 27 recruits against a target of 60). Likewise Kuopio cannot reach its targets, partly because of restrictions on the number that can enter medical education. While there are possibilities for recruitment of students from polytechnics, the procedures for handling this have yet to be established. Indeed, all of the universities have problems of accreditation of prior learning of non-traditional students. Successfully addressing these problems would undoubtedly strength regional engagement.

Moving to student progress through the university and into employment, the PRT were particularly interested in how the universities managed links with regional employers; examples include the arrangement of work placements, creating opportunities for students to undertake dissertation projects and more generally guiding students in course choice in ways that reflected local employment opportunities. In all three universities these activities were divided between the departments, the student office, the student union and the careers service, with no one body or organisation formally having overall responsibility. Having said this the university careers services appear to be moving into this role. For example, the University of Kuopio service has established a 0.5 credit course entitled "From University into Working Life" which is available within six different degree programmes. The Team noted with approval the creation of a joint database of new graduates from three universities compiled by the careers service and actively marketed in Eastern Finland. Because the careers service are located in the Centres for Continuing Education/Training and Development with their strong links with regional employers, this arrangement provides a good basis for connections into the mainstream academic programmes.

In several instances we were impressed by the initiative shown by the students' union in addressing student management and support—for example the dialogue between Kuopio students and the city authorities about living conditions. However, we were not aware of standard procedures for engagement of student representatives in progression/regional issues. Students have a strong stake in the formal governance structure, but their engagement in institutional management processes appears to be incidental.

Our discussions with lecturers and students suggested that in all universities the student guidance in relation to the labour market varied from programme to programme. Just as in the sphere of student recruitment from the region, the universities need to collect and analyse data on desti-

nations and subsequent careers of their graduates to monitor progress. Graduates working in the region are also an important source of intelligence to guide the development of new teaching programmes and to engage in the process of technology transfer; especially SMEs and the universities need to exploit this resource in a systematic manner.

5.5 Human Resource Development

Regional engagement imposes new demands on the management of universities, which can be met by an active human resource development policy. The PRT were disappointed at how little thought and resource were devoted to this issue in all three universities. Staff recruitment, development and reward were in our view under-problematised areas. Beyond a general distaste for "suitcase professors", it was difficult to get a view as to the priority attached to attracting national and international academics who would settle locally. There also seemed to be no policy for developing teaching assistants and young postdoctoral staff through training in teaching, research and administration. Teaching on Continuing Professional Development programmes appears to be rewarded on an individual and ad hoc basis and not as part of an overall personal development programme. No university mentioned staff appraisal processes in which teaching and personal research plans were reviewed on a regular basis. And we were not informed of any systematic senior management development programme for vice-rectors, deans and heads of department.

The PRT recognise that shortcomings in this area are not unique to the three universities. However, we are firmly of the view that if the universities are to respond to new regionally based agendas they will need to develop the skills and competencies of their staff at all levels. We were therefore particularly pleased to learn that the three universities are participating in a national review of reward systems in the Finnish public sector.

5.6 Centres for Training and Development/ Centres of Continuing Education

In the view of the PRT these centres play a key role in the engagement of all three universities with the region, being responsible for the Careers Service, the Open University and Continuing Professional Development (CPD). The universities receive earmarked funding for the Open University activity but vocational education has to be provided at cost to the end user; teaching is purchased within the university and from outside. Because some of the activities of the centres is performed in a market-orientated way, they have a potential for contributing towards a shift within the universities from a culture of "production" towards a pattern of teaching that can respond to regional needs. The challenge for the universities is to therefore ensure that the work of the centres is mainstreamed into the

academic planning of faculties and departments and is embedded in related financial, student and human resource management systems.

Discussions at our Savonlinna seminar identified significant opportunities for the three centres to work together in harnessing their universities to the development of Eastern Finland. More specifically, the centres have the capacity to foster inter-disciplinary and inter-institutional collaboration in projects, which bring together academic and external partners in the public and private sectors. The centres can and do play a key role in the initiation of new projects and their subsequent co-ordination and management using their own skills and contacts. They also provide a possibility for linking teaching and applied research, for example in the Centres for Expertise in such subjects as welding (LUT) and Travel and Tourism (Joensuu).

A major challenge for the universities is how the work undertaken by departments through the centres is purchased. Because of the limited opportunities for additional earnings by academic staff, this is usually negotiated on an individual basis. At Kuopio University this is moving to a system of contracting with departments; this makes it possible for CPD to be entered into departmental teaching and research plans in a systematic manner, thus ensuring a stronger university ownership and responsibility for regional engagement. The PRT would strongly support this as a general model along with joint appointments between the centres and departments. In addition we would also like to see the directors of the centres becoming part of the senior management team of each university, closely involved in its strategic planning and guiding its day to day responses to regional needs as and when these arise.

5.7 Relationship Management and Leadership

The Review Team paid particular attention to the meetings we requested with local stakeholders—companies and the representative bodies for the private sector, municipalities and regional councils. We were impressed by the strength of local support for all three universities. However, the part these external bodies and their concerns play in the process of decision making within the universities was less than clear. In all cases it seemed that the rector was the key channel of communication; whilst there was dialogue at lower levels, it was unclear to us as to how communications upwards and downwards within the university was handled. Insofar as relationship management falls to the rector this could cause problems when new rectors are appointed—as it has recently happened in all three institutions.

The self-evaluation did not elicit strong evidence of regional strengths, weaknesses, threats and opportunities (SWOT) analysis undertaken by each university with its regional partners and which highlights the distinctive contribution that the university might make. The principle source of knowledge of the regional economy appears to reside in the Cen-

tres of Continuing Education/Training and Development but it was unclear to us how this was being used to guide the institutions forward.

These shortcomings point to the need to build on the evaluation process initiated by the Council. The Savonlinna workshop provided a number of suggestions as to how this might proceed.

First, the new academic leadership of all three universities (Rectors, Vice-Rectors, Deans) needs to be engaged in the regional evaluation process—the baton needs to be passed across. This points to the need for a regular summer retreat involving a cross section of key staff.

Second, a process of dissemination of the shortened version of the self-evaluation report is required, both within the university and to regional partners. The local media need to be engaged in this process. Faculty and departmental discussions need to take place and a regular newsletter covering regional interest items/success stories circulated. The exercise needs to be repeated regularly but with a lighter touch.

Third, inter-departmental variations in the quality of the management of processes of regional engagement need to be highlighted in a positive way by giving publicity to areas of "good practice" and thereby causing others to reflect on their own lack of it.

Fourth, more systematic use of statistical information on recruitment of students and their progression and placement with employers in the region needs to be introduced throughout the universities. Likewise information on research and consultancy contracts and continuing professional development.

Fifth, the university and other decision making levels (faculties and departments) need to consider the case for creating their own advisory boards drawn from the region to better inform them of regional needs.

5.8 Summary and Recommendations

The Peer Review Team were impressed by the quality of the self-evaluation exercise undertaken by the universities, the openness with which they engaged with us on site visits, the thoroughness of their responses to our additional questions and the vitality of their collective contribution to the workshop we facilitated. We hope they will continue to move forward individually and together. The new universities act, the appointment of a new set of rectors and the participation in this evaluation process provides the opportunity for all three universities to review their management processes in order that they can be even more responsive to regional needs.

Rather than produce large list of detailed recommendations covering each section of this Chapter, the PRT recommend that each university review its self-evaluation report and the process of strategic, financial and human resource arrangements, the role of their Centres of Continuing Education/Centres for Training and Development and the links between institutional and regional leadership. We further recommend that the established Council convene a joint workshop in the summer of 1999 to

enable the universities to share experiences and compare progress, possibly with a select group of partners from Eastern Finland. Finally, given the key role of the above mentioned centres (which are also present in the polytechnics) we recommend that the Council convene a national review of the role of these organisations in relation to higher education and regional development.

Introduction

Lappeenranta University of Technology (LUT) was conceived in the 1950's and founded in the 1960's as a product of the regional development policy for Eastern Finland. Its purpose from the outset was to create engineers to meet the perceived regional and national demands as indicated by national surveys of future needs. Its unique quality was to combine engineering with management to give training in both engineering and economics.

Teaching at the University began in 1969 with study programmes in Mechanical Engineering (originally machine design), Energy Technology (originally power plant engineering) and Industrial Engineering and Management. Chemical Technology was added to the teaching programme in 1975 based on the needs of the regional paper and pulp industry. The Department of Information Technology was created in 1985 and Electrical Engineering started as an independent teaching programme in 1997. Teaching of Business Administration began in 1991.

From the outset, the University has recognised the need to develop high quality research as a means of establishing the reputation of its departments and underpinning the quality of its teaching programmes. It has also recognised the need for technology transfer and to this end founded the technology centre Kareltek Oy in the late 1980's, both to develop university research into entrepreneurial activity, and to encourage the establishment of new businesses in close collaboration with the University.

The Centre for Training and Development was established to offer continuing education programmes and to act as a link in transferring university expertise to industry, business and society through a number of development projects. The Centre has recently established an executive MBA programme and is helping to identify research opportunities for departments through its close industrial contacts.

In the opinion of the Peer Review Team the University is to be congratulated on the extent to which it has fulfilled its original objectives and expectations. It has created a high quality university campus environment with an enrolment of over 3,500 students and a staff of over 500. The University is expected to grow to a student population of over 5,000. Moreover, it has been successful in identifying courses, which satisfy regional and national demand, and as a result the employment prospects of its graduates have proved to be excellent. The University has an important influence on the industrial, economic and educational life of the region, whilst not losing sight of the need to fulfil a national role and to establish an international reputation. The University has proved itself able to respond to changing needs, both in the introduction of new courses and curricula and in the exploitation of opportunities for research. It has been prepared to establish new departments, special units and new administra-

tive structures to support and promote new developments. The PRT were impressed by the commitment of the teaching, research and administration staff and the extent to which they were all aware of the problems facing the University in a rapidly changing external environment. Furthermore, by the need to critically review all aspects of the University's operations in the development of new structures to exploit the opportunities of the coming decade.

Self-evaluation

The self-evaluation report is comprehensive, thorough, forthright and honest. It places a critical analysis of past achievements and opportunities for future development against a sound conceptual and philosophical discussion of educational strategies for universities within a national and regional context. The evaluation contains a detailed SWOT analysis of individual departments. Certain common themes occur across departments; amongst the perceived strengths are:

- Courses which clearly satisfy perceived industrial need, leading to very good employment opportunities for graduates
- Good relations with industry and good support from industry for student projects
- Good regional effectiveness
- Good staff/student relations
- Good connections with stakeholders
- Flexible and adaptive, non-bureaucratic infrastructure.

Amongst the weaknesses commonly identified are:

- Need for more international research contacts and basic research
- Need to include humanities and entrepreneurial skills in core curriculum
- Difficulties in recruiting competent people against the higher industrial salaries
- Need to improve the international reputation of the University
- Need to improve collaboration between departments
- Need to improve the mechanisms for strategy formulation.

The PRT recognise that the majority of its own concerns and suggestions has already been identified in the self-evaluation report, and are being addressed in various ways within the University. There are a number of additional concerns, which are discussed below.

Regional impact

The University has successfully fulfilled the regional role expected of it at its establishment in the 1960's. The municipal authorities and local industries were very supportive of, and took evident pride in, the contribution, which the University made to the city and the region. Over 1,200 jobs are created directly and indirectly by the University with some 70% of the total employment generated situated in Lappeenranta. However, as with other universities LUT's impact is local rather than regional. It does not act as a technical university for Eastern Finland but aspires to be one of a national group of technical universities.

A significant percentage of student enrolment comes from the region, and 75% of the students who apply to Lappeenranta University of Technology do so as their first choice. However, it is also true that the technical universities of Helsinki and Tampere do attract the better-qualified students. The "lion's share" of all new engineering graduates recruited in local enterprise in LUT's fields of specialisation comes from LUT and the number of regionally employed graduates would appear to be increasing. It should be remembered that the demand for graduates in the immediate region is not sufficient to absorb all LUT's graduate output and that the regional job opportunities vary according to the subject taken. Thus the regional opportunities for graduates with specialisations, which suit forestry, pulp and paper industries are high, whereas those for mechanical engineering are more widely dispersed.

In addition to satisfying the traditional educational needs of undergraduates and graduates, the University is perceived as fulfilling a wider educational need in providing continuing educational programmes and non degree courses in support of the demand of the local community. The range of these courses has in the past been limited by the technical nature of the expertise developed in Lappeenranta University of Technology. The Peer Review Team recommend that LUT seriously consider how it might broaden the field of education via programmes offered through its Centre for Training and Development.

The University has also been very active in helping to provide a bridge between schools and University by running a number of summer schools in the basic sciences. The municipal authorities have indicated tangible support for the University by underwriting a number of educational developments. Most recently in providing support to enable the establishment of an executive MBA programme.

A number of staff at the University are beginning to play a part in the development of the municipal affairs of the city through involvement in local government, local organisations etc. and their spouses have added to the supply of qualified teachers for the schools in the area. Having said this we were concerned about the high proportion of academic staff who did not live in the region with 17 of the 41 professors having their residence outside the Karelia/Kymi area.

The local industries were forthright in their support for the University. There is close contact between the professors and industry, and as the

local industrial community is relatively small, informal networking was perceived to work very well without the need for elaborate, formal structures to develop relations between the University and industry. A very high percentage of master's theses are carried out in collaboration with industry and the University is clearly perceived by the industries as producing high quality graduates for the region. There is active collaboration between local industries and the University in research, and in one or two instances industry provides support for the establishment of Chairs in areas of particular expertise.

The University has been very successful in addressing the needs of the major industries in the area. However, it must be recognised that in a number of cases the employment opportunities in these traditional industries is reducing. The University therefore has a role in helping to bring new industries into the area and to support the development of infrastructure, which support such industries. The University is already making an impact on this issue in a number of ways: the technology transfer centre, Kareltek, has been successful in promoting new, high tech based SME activity in the region. Over 120 enterprises and units have been established over the years and the number currently employed in Kareltek is some 450 of whom 50% have graduated from LUT. We were impressed by the University's role in the South Karelia: "Towards the Information Society" regional project which attempts to boost the concept of an information society in the region as a whole. The Peer Review Team recommend that University maintain a close dialogue with the regional planning authorities and with the national government in establishing how it can develop and strengthen its role in supporting the future industrial development of the region.

In fulfilling its regional responsibilities, any university these days can only exist by developing a strong national and increasingly international identity. The University is seeking to widen its national and international profile in a variety of areas and involving itself and its industrial partners in a number of national and international networks. It is a widely held, though not universal, view within the University that it should exploit its geographical position, being close to the Russian border and to the city of St Petersburg, and its long history of cross-border trade. Some activities in transitional economies are already well established.

The Peer Review Team were impressed by the senior management's identification of Russian Knowledge co-operation as a cross cutting theme in the University's profile. We therefore recommend that the Russian theme be promoted widely across the University and the possibility of collaboration with other universities in Eastern Finland thoroughly explored.

When the University was founded, it was expected that it would have a significant impact on the cultural life of the region. In this respect it is generally accepted that the University has not fulfilled its promise. To some extent the University has fallen victim to its own perception as a technical university with emphasis on courses in engineering and business, and therefore less relevant to the cultural development of the community than would

have been the case if there had been a strong humanities element to its educational programmes. It has to be recognised that a town the size of Lappeenranta cannot be expected to support a wide range of cultural activities, but it is clear that the University does not add to the cultural diversity within the town to the extent that was expected and hoped for. The Centre for Training and Development has a role to play in developing the adult educational programmes available to meet the perceived demand for courses in art, history, humanities etc., even though these may require the importation of teaching staff. Similarly, though other cultural events, in music and the arts, are already being organised in partnership between the city and the University, there is scope for more imagination and leadership in promoting such activities further. One of the barriers to such activities appears to be the perceived problems of distance of the campus from the city centre. More thought has to be given to how to bring the city to the campus, or to establish a presence for the University in the city, through the establishment of, say, a "University Centre" within the City. In summary, we recommend that policies should be developed to strengthen the social and cultural ties with the city and region.

Strategic management

The administration of the University has been established on traditional lines and according to the regulations laid down by the Ministry. It has been perceived as effective, responsive and non-bureaucratic. However, it is recognised that changes in the administration and organisation of the University are necessary to cope with the increasing size of the University, an increasingly uncertain external environment, and the need for new initiatives. A number of changes have already been identified: two vice-rectors are to be appointed, one responsible for research and one for teaching. The departments are to be grouped into three units: Business Administration, Industrial Engineering and Management; Energy Technology, Chemical Technology and Mechanical Engineering; Electrical Engineering and Information Technology. Each of these groups is to be administered by a scientific council chaired by a vice-rector. This reorganisation should help in establishing greater co-operation and in exploiting the synergy between departments in the development of inter-disciplinary courses and research. Although the various administrative councils, scientific councils and departmental councils have been streamlined under the new administration, the nature of these councils is still representational of the interests of professors, other staff and students. They do not necessarily help the University move towards the more managed structures which may be necessary to respond to a dynamic environment and to establish and fulfil its regional, national and international policies. In addition to the changes in structures currently being undertaken: we recommend that the University give further thought to the processes by which the management of the University might be effected, particularly how the activities of the various special units can be aligned with those of the departments. We also recommend that further consideration be given to the processes whereby an overall strategy for the University is developed. This needs to be sensitive to the reconciliation of the bottom-up demands of the departments and special units with the top-down strategic vision of the administration. It needs to incorporate mechanisms for developing such strategic vision, which is sensitive to the forward demands and requirements of the regional stakeholders.

Teaching and learning

The University has been particularly successful in identifying and developing niche areas to satisfy the needs of selected industries and in developing a reputation for the integration of engineering, management and business studies in its various courses. There was a recurrent suggestion that the curricula of the various departments should be enlarged by the introduction of more humanities subjects, and this might be useful in helping to differentiate the nature of the university courses from those of the polytechnics, other than simply in the depths to which the engineering subjects are studied. Although industry also suggested that the courses should be enlarged in this way, at other times it placed emphasis on its need for students with strong practical skills. Here again there is potential for competition in the industrial relevance of the graduate output from the University and that from the polytechnics. The differentiation could be enhanced by incorporating greater emphasis on entrepreneurial skills within the university courses. This was also perceived as increasingly important by the industrial stakeholders and by the municipal stakeholders in helping to develop future industries in the area and particularly in the SME sector.

Staff/student relations within the University are good, and the University has provided excellent support for student activities including support for the establishment of a student centre. Although generally happy with the technical aspects of the education they received, the students were concerned that there were gaps in their education in developing social and teamwork skills, communication and managerial skills. These areas clearly need to be addressed in future curriculum design. Indeed, the University has already established a working group to consider how best to deliver these aspects of curriculum. The Department of Business Administration is currently trying to fill a Chair of Management with special emphasis on SMEs and it is hoped this might lead to the foundation of a special multidisciplinary entrepreneurial institute which could impact on the curricula in the soft social science inclined areas.

Although a high level of satisfaction with the teaching was expressed by the students in their response to the self-evaluation questionnaire, the approach to total quality audit and assessment within the University is fragmented and the importance attached to quality assurance and the measures taken to sustain it varies between departments. In the absence of any nationally agreed guidelines from the Ministry on the assessment of teaching quality, we recommend that the University should consider adopting a more proactive role in imposing appropriate measures on all departments to ensure the maintenance of a high quality teaching and learning environment.

Centre for Training and Development

Lappeenranta University of Technology has organised continuing education courses since 1976 and the Centre for Continuing Education was set up in 1987 to encourage its systematic development. The Centre has been very active, from identifying short courses focused on industrial needs to the recent development of the executive MBA in global integration and technology business. The Centre also assists in the development and support of regional networks. The Centre seeks to align its activities with those of the departments, and its courses are staffed by professors of the various departments. The Board of the Centre is chaired by the Rector. The various interests of the University are well represented on the Board. Nevertheless, as the Centre develops its activities there is potential for conflict in the priorities identified by the Centre and those of the departments, with the increasingly difficult balance they have to maintain between teaching and research. The Peer Review Team recommend that the University review the management of the interface between the Centre and the University in order that its enthusiasm and activities can be closely aligned to the strategic plan for the University in terms of its regional and national role.

Research

All departments are committed to the concept of a research-led university and to the development of their reputation for high quality research. The current research profile of the departments varies, largely depending upon the age of the department. Concerns expressed by a number of departments are in the absence of a "critical mass" and insufficient funding to support basic research. It is important therefore that the vice-rector responsible for research ensures that there is close co-ordination between the departments and the Centre to provide appropriate focus of resources in those areas where it is believed a department can deliver high quality research activities. To this end the departments must be encouraged to develop their role as nodes of national and international networks and to become more involved in securing a higher proportion of EU research funding.

The University is active in setting up a number of centres of excellence and in providing greater freedom for professors to set up research institutes. Whilst such activities are to be encouraged, the potential conflict between the interests of the institutes and those of the departments must be carefully anticipated and managed. In summary, we recommend that the University develop an active research policy which highlights it research, facilitates collaboration across the campus and with national and international partners.

Financial management

In common with all Finnish universities, the financing is based partly on state funding and partly on the income earned from outside sources through research contracts, grants etc. The current share of outside financing is in the order of 30% of the total annual budget, which is relatively high compared with many universities, and Lappeenranta University of Technology is to be commended for achieving this level of activity (worth currently approximately FIM 50 million). The university is in a good position to achieve its aim of raising its share of outside funding to 50% of the total.

The University places appropriate emphasis on the provision of library facilities to support undergraduate and postgraduate teaching, research, and as a potential service to the local industrial and business community. However, it must be noted that the apparent spend on library provision is the lowest of the three universities. Given the acknowledged importance of the libraries to underpinning the development of the university we recommend that the University must carefully reassess library expenditure against its other priorities.

Human resource management

The university has been very successful in retaining staff. Whilst this has advantages in maintaining stability and continuity, it is important that any university should continue to recruit new staff to ensure a constant regeneration of attitudes and ideas. It is essential to the achievement of the University's plans that it be able to compete with other universities in the recruitment of high quality staff. A city the size of Lappeenranta cannot provide the cultural and other amenities of a larger city. The University has therefore recognised that it has to place emphasis on the development of high quality housing in the area, high quality amenities of the natural surroundings, high quality schools etc. It must also ensure that the working environment and facilities for research compete with those, which would be found at other major universities. The recently enacted legislation regarding universities provides greater flexibility for universities in the individualisation of professorial salaries and in the application of financial incentives. This may also help the University in competing for key staff to support its new initiatives.

Image

Both staff and students expressed concerns about the national and international image of the University. It is difficult for any new university to compete in reputation with the older universities or those from the metropolis. The policy of the University to establish high quality in teaching and research in specific niches will, over time, develop and enhance the University's reputation. With regard to the University's international image, this varies between departments. Some departments have been very active in establishing themselves within international networks, and encouraging student exchange, in running international seminars and con-

ferences etc. The PRT recommend that the University establish mechanisms for the enhancement of its national image and its international profile and to improve the self-perception of the University amongst its own staff and students.

Recommendations

- 1. The Peer Review Team suggest that Lappeenranta University of Technology give further thought to the processes by which the management of the University might be effected, particularly how the activities of the various special units can be aligned with those of the departments. We also recommend that further consideration be given to the processes whereby an overall strategy for the University is developed.
- 2. In the view of the PRT, the University should develop an active research policy, which highlights its research, facilitates collaboration across the campus and with national and international partners. We also recommend that LUT establish mechanisms for the enhancement of its national image and its international profile, and to improve the self-perception of the University amongst its own staff and students.
- 3. The University should consider adopting a more proactive role in imposing appropriate measures on all departments to ensure the maintenance of a high quality teaching and learning environment. The PRT also suggest that the University consider the development of its curriculum to place greater emphasis on communication, teamworking and entrepreneurial skills.
- 4. The Peer Review Team recommend that LUT maintain a close dialogue with the regional planning authorities and with the national government in establishing how it can develop and strengthen its role in supporting the future industrial development of the region, and that policies should be developed to strengthen the social and cultural ties with the city and region.
- 5. We recommend that the University review the management of the interface between the Centre for Training and Development and LUT in order that its enthusiasm and activities can be closely aligned with the strategic plan for the University in terms of its regional and national role. LUT should seriously consider how it might broaden the field of education via programmes offered through the Centre.
- 6. We recommend that the Russian theme be promoted widely across the University and the possibility of collaboration with other universities in Eastern Finland thoroughly explored.
- 7. Given the acknowledged importance of the libraries in underpinning the development of the university, we recommend that the University carefully reassess library expenditure against its other priorities.

The University of Kuopio was established in 1966 to meet the increasing demand for an academic workforce by providing study opportunities in Eastern Finland primarily in medicine, dentistry and natural sciences. In more recent acts, pharmacy and social sciences have been included in the curriculum of the University, and education in dentistry has been discontinued. The University has currently four faculties (Medicine, Natural and Environmental Sciences, Pharmacy, and Social Sciences), seven auxiliary institutes for teaching, research and support services, and twelve programmes for the master's degree. The research priorities of the University include biotechnology, molecular biology and medicine, diseases of public health importance, environmental health, medicines, nursing, economic as well as social issues related to health including social care services, entrepreneurship and regional development.

Self-evaluation report of the University

The University has conducted an extensive evaluation on its effectiveness and quality as a part of the overall evaluation of the universities of Eastern Finland. The background material used in the evaluation include questionnaire surveys among students and several interest groups, a discussion seminar with various interest groups of the region, self-evaluation reports of the faculties and institutes, evaluation of learning and instruction and research activities, and a summary evaluation of the University's educational, cultural and economic impact.

The Peer Review Team were pleased to note the high quality of the evaluation report. The discussion is candid bringing up the strengths and weaknesses, threats and opportunities in a balanced way. The conclusions are sound, and, with few exceptions, correspond to the views of the Team.

Meeting the original objectives

In view of the Peer Review Team, the original objectives set for the University in the 1960's have been well met. The institution has developed in 30 years into a traditional university with high-quality international academic research. The shortage of physicians and dentists in Finland has been eliminated, and the University of Kuopio is a nationally and internationally recognised centre for health and environmental sciences. The University has established several pioneering programmes based on inter-disciplinary orientation, such as ergonomics, nursing sciences, social pharmacy, health administration and health economics, toxicology, applied zoology and environmental health. The number of under-graduate students has increased from 860 in 1976 to 3,126 in 1996. Postgraduate students have doubled from 517 in 1986 to 1,084 in 1996. The research volume has continuously increased.

In the original considerations the medical education in the University of Kuopio was envisaged to be strongly oriented towards public health and community medicine. This goal has only partially been achieved. The emphasis in medical research is currently in biomedicine and biotechnology, while research on community medicine and primary health care is not so advanced. On the other hand, the Medical Faculty has developed a strong epidemiological research programme successfully exploiting basic, clinical and epidemiological methods. Overall, the medical curriculum of the University of Kuopio has a very good reputation.

Mission of the University

According to its present mission the University of Kuopio is a university nationally oriented to health and environmental sciences. It set itself the task of raising the level of knowledge and education by means of internationally comparable high-quality research and instruction based thereon. Furthermore, to improve the quality of life and welfare in Finland by these objectives. The strategy of the University includes two objectives—a traditional academic approach based on individual achievement and internationally competitive research and a business oriented approach with strong support for local business activities and for entrepreneurship.

The University has successfully executed its "double strategy" in health and the environment. The medical faculty has developed in 20 years a research programme of high international quality, transformed the central hospital into a university hospital, and is currently taking steps to establish high technology business activities based on health sciences in the region. A similar process is taking place in environmental sciences, albeit at a slower pace. On the other hand, the strategy has not worked as well in those areas falling outside the main focus of the University. The number of small and medium-sized businesses is growing too slowly, and a survey carried out in the region suggests that services provided by the University to promote entrepreneurship are not very well known. Furthermore, the Peer Review Team got the impression that the staff of the University is not unanimously committed to the work done to promote local business activities.

The Peer Review Team support the University in its attempts to develop high quality academic research and, at the same time, to support local entrepreneurship. However, the strategy will be successful only if more resources are directed to activities supporting local industry. The role of the Centre for Training and Development and Open University (in collaboration with the Polytechnic) in this process is pivotal (see later).

Development projects

The University is currently investing in several developmental projects in order to improve its academic competitiveness and regional impact. These projects include e.g. developing the Bioteknia 2/Mikroteknia complex, programmes for drug research, environment, health and society, transgenic

animals, health care technology, nutrition and food technology programme

and agrobiotechnology.

The Peer Review Team were impressed by the quality and volume of the work of those projects that it could review. The programmes comprise a coherent package of activity based on high-quality academic research carried out at the University. Moreover, it offers opportunities for technology transfer and development of regional enterprises with great potential for the future.

Funding

The budget of the University of Kuopio totalled about FIM 310 million in 1996. The operating costs covered by the state budget amounted to approximately FIM 200 million. The external research funding has been on the increase and was approximately FIM 50 million in 1996. The largest funding source was the Academy of Finland (ca. 40%) whereas foreign research funding accounted for about 20%. The contributions of the Finnish Technology Development Centre (TEKES) and domestic industry have been relatively small although they have recently been growing.

In view of the Peer Review Team the balance between the state budget for basic functions and external funding is satisfactory in the area of academic research. On the other hand, the contribution of TEKES and industry are at an unacceptably low level considering the strong commitment of the University to the promotion of local industry. The University should take steps to attract more money for technology research and encourage joint applications by the University and local industry to TEKES and other technology development funds.

Impact of the University on local and regional development

Establishment of a university in Kuopio has had far-reaching effects on the city of Kuopio and on the adjacent region. Since the beginning of the University, about 8,000 degrees have been conferred by the University, and almost one half of the students come from the region. The graduates of the University have succeeded well in finding a vocational job corresponding, and a significant per cent has stayed in the Kuopio area (ca. 33%) or in Eastern Finland (ca. 45%). The employers are generally satisfied with the professional skills and competence of the University's graduates.

The economic effects of the University on Northern Savo are substantial. Although the University accounts only for ca. 1.2% of the total of the 94,000 employed in Northern Savo, the employment effects of the University's own personnel (1000) and students (3,800) are considerable. According to a recent cash-flow analysis the direct economic effects amounted to FIM 207 million, while the indirect effects were ca. FIM 320 million. Furthermore, the university hospital status of Kuopio University Hospital has contributed FIM 100 million as special subsidies to the region. Of the salaries and taxes 90% were paid within the former Province of Kuopio.

The University has succeeded exceptionally well in training experts and professionals for regional health care and social care organisations. The reputation of both the university hospital and the regional primary health care is excellent. By 1997 the majority of the physicians and university-trained nurses working in these organisations are graduates of the University of Kuopio.

The University of Kuopio has played a significant role in the establishment and continuos development in Kuopio of the local units of four sectored research institutes. Their institutes are the National Public Health Institute, Finnish Institute of Occupational Health, National Veterinary and Food Research Institute and National Geological Institute. They provide employment for more than 300 personnel who add to the critical mass of the research programmes and have a substantial direct and individual economic effect on the region.

The number of the unemployed has remained exceptionally high in Northern Savo since 1992. This problem can only be solved through development of the region's economic structure, particularly that of entrepreneurship and small- and medium-sized businesses. Here the University has not yet succeeded; while some projects in clinical medicine and other health sciences have lead to increased business activity, the impact is still minor and has not had any significant effect on the local economy or employment. The Peer Review Team are concerned that the existing basic economic sectors of Northern Savo and the priorities of the University research and education programmes have not connected with each in areas other than health.

The key instrument in supporting local entrepreneurship and small-and medium-sized businesses is the Centre for Training and Development, which has the task of promoting transfer of expertise between the University and the surrounding region. The Peer Review Team strongly recommend more support—both financial and immaterial—to the Centre. New resources should primarily be used to develop collaboration with Kuopio Polytechnic, the Regional Council of Savo, Kuopio Chamber of Commerce, and the cities of Kuopio and Siilinjärvi. All steps should be taken to intensify collaboration in this area with the Universities of Joensuu and Lappeenranta (see later).

The Peer Review Team noted that the Kuopio Science Park located in the University Campus has grown rapidly and consists currently of about 70 high-technology enterprises. On the other hand, only few of these enterprises have originated from innovations by the University staff. Furthermore, the collaboration between the enterprises and the University does not seem to be active. The Peer Review Team were concerned at the apparent absence of a coherent structure for the dissemination of research results to local industry. Therefore, the Peer Review Team recommend that the University would urgently review its current arrangements for technology transfer and for patenting and licensing the products of its research and for the establishment of suitable mechanisms for the protection and exploitation of its intellectual property.

The establishment and development of the activities of Pohjois-Savo Polytechnic offer major opportunities in regard to regional development, although the Polytechnic partially competes with the University for the same students, enterprise connections and for the regional development grants. Allying with the Polytechnic is regarded as a very promising strategy, because the limited resources in research, development activities and education may be integrated within the region. The relocation of the Emergency Services College in Kuopio has also provided co-operate opportunities e.g. in the field of natural sciences. The Peer Review Team have been informed that the opportunities and willingness to co-operate are excellent both among these organisations and with the representatives of the University.

In summary, the Peer Review Team agree with the conclusion of the self-evaluation report in regard to the regional effectiveness. The local impact in health has been substantial, whereas for basic economic sectors, the University has only partially met the legitimate needs and expectations. In these areas, the tension between the traditional academic policy and the regional development policy remains. All efforts should be taken to find solutions for this problem.

Administration

The management of the Finnish universities has undergone a profound change in the 1990's. The autonomy has increased as normative management has been replaced by information steering and by framework budgeting. On the other hand, fund allocation based on strict performance criteria, annual contacts with the Ministry, and structural reforms based on relatively short-term projects have limited the independence of the universities.

The Peer Review Team gained the impression that, while the management system is basically in good order, the University has not yet fully adapted to the new circumstances. Some of fundamental structures seem to be lacking (or they are managed on an *ad hoc* basis), and the division of labour between organisational units and between key individuals is unclear. These problems are of paramount importance as the effectiveness of a university to respond to various needs e.g. regionally is critically dependent on these processes.

We noted that student management practices are not operating properly. Although home locality and accrual of new students, drop-out rates, employment in the region and elsewhere after graduation, and regional job placement were analysed as a part of the self-evaluation project. These data have not been monitored routinely. This information would be of the utmost importance, in order to match the output of the University with regional needs, small- and medium-sized businesses, public sector and others.

In the view of the Peer Review Team, the arrangements for budget planning, fund allocation and monitoring also need refinement. This is not a major problem for the departments with a fixed number of perma-

nent posts, relatively constant running costs, and research funding negotiated directly with external funding agencies. On the other hand, the process is of paramount importance for strategic processes in regional policy, such as the Centre for Training and Development.

The Peer Review Team recognised that although the autonomy of the University in defining its staff policy has lately increased, the University has not exploited the new opportunities. The PRT recommend that the University take a review of its current arrangements and develop a human resources policy (e.g. continuous education, sabbatical system, incentives based on numeration etc.) with the aim of attracting and retaining the best available staff.

We also noted that, while the University has established procedures for graduate studies, these procedures do not always function properly. There are major differences between departments in supervision and monitoring of graduate students with the best records in the new graduate schools. The Peer Review Team suggest that a system be developed for ensuring that the overall training programmes and environment properly meet the needs of all graduate students. Furthermore, it is recommended that the graduate students be fully informed of the regional policy to enhance the ownership of the regional policy at this level.

Strategic planning, contacts with the Ministry and with key organisations and key people in the region are based on the ability and working capacity of the Rector. The Peer Review Team strongly recommend that the mechanisms for strategic planning be consolidated, particularly in regional development. It is likely that there are latent opportunities and possibilities of spin-off of the existing activities, which have not fully been exploited. To improve commitment to regional development, one of the two vice-rectors should focus on regional policy matters, each department should make a response to regional policy (e.g. series of seminars), and a systematic contracting between the departments and the Centre for Training and Continuous Education should be established.

Collaboration between universities of Eastern Finland

The three universities of Eastern Finland were established in the 1960's with the aim of developing higher education and academic research in the eastern part of the country. Each of the three universities has developed a profile of its own, with Kuopio focusing on health and environment, Joensuu on social sciences, while Lappeenranta is strongly oriented towards technical sciences, economy and business. Over the years, there have been attempts to expand the functions of the University of Kuopio to those areas specialized in by Joensuu and Lappeenranta, but these attempts have failed because of the economic realities.

The Peer Review Team took the view that the profile developed by the University of Kuopio is well grounded, and the division of labour between the three universities is appropriate. On the other hand, the collaboration between the three universities is minimal at the present time. This is partially a result of geographical reasons and partially derives from the different profiles of the universities. The Peer Review Team recommend that more dialogue and active collaboration should be evolved in areas shared by the universities, e.g. social sciences, continuing education, technology transfer, and promotion of local entrepreneurship.

Recommendations

- 1. The Peer Review Team strongly support the University of Kuopio in its attempts to develop high quality academic research and, at the same time, to support local entrepreneurship. However, the strategy will be successful only if more resources are directed to activities supporting local industry. The role of the Centre for Training and Development and the Open University (in collaboration with the Polytechnic) in this process is pivotal.
- 2. The balance between the state budget for basic functions and external funding is satisfactory in the area of academic research. On the other hand, the contribution of TEKES and industry are at an unacceptably low level considering the strong commitment of the University to promotion of local industry. The University should take steps to attract more money for technology research and encourage joint applications by the University and local industry to TEKES and other technology development funds.
- 3. The Peer Review Team recommend that the University urgently review its current arrangements for technology transfer and for patenting and licensing the products of its research and for the establishment of suitable mechanisms for the protection and exploitation of its intellectual property.
- 4. The Peer Review Team also suggest that a system be developed for ensuring that the overall training programmes and environment properly meet the needs of all graduate students. Furthermore, it is recommended that the graduate students be fully informed of the regional policy to enhance the ownership of the regional policy at this level.
- 5. Strategic planning, contacts with the Ministry and with key organisations and key people in the region are based on the ability and working capacity of the Rector. The Peer Review Team recommend that the mechanisms for strategic planning would be consolidated, particularly in regional development. To improve commitment to regional development, one of the two vice-rectors should focus on regional policy matters, each department should make a response to regional policy (e.g. series of seminars), and a systematic contracting between the departments and the Centre for Training and Continuous Education should be established.

The University of Joensuu was founded in 1969 with a strong initial orientation towards teacher training. From that point of departure the objective later became to develop a high standard institution of higher education. Consequently, the University today is characterised by a broad spectrum of basic disciplines in science, social science and the humanities. The first academic chair without direct connection to education was in economics. After an intensive national debate forestry was added as a new faculty in 1983. Today the University is organised into five faculties (Education, Humanities, Science, Social Science and Forestry). The Centre for Continuing Education has a complementary role as an external interface for the University. The Centre runs a number of activities with regional orientation including the Open University programmes.

During the 1980's the University of Joensuu became well established in a number of disciplines. For example, within the Faculty of Social Sciences behavioural sciences and especially regional science became well known, and in the natural sciences, chemistry and physics. The development of forestry as a new faculty during the 1980's has given the university standing within a key sector of the Finnish economy, a standing which is underpinned by a strong international scientific network. The faculty has also provided one of the most important links between the University and the industrial base of Eastern Finland. It is recognised as a national Centre of Excellence for teacher education in the fields of mathematics and physics and its Research and Development Centre for Information Technology Education has further raised its profile as an institution at the leading edge of educational innovation.

Today the University has around 6,000 students of which about ten per cent are postgraduates. The Open University programme engages a large number of people, most of them on short courses and mainly recruited from the region. The university staff of just over 1000 includes approximately 500 academic professionals, teachers and researchers.

Self-evaluation report

The University has presented an extensive self-evaluation report, which demonstrates a number of interesting opportunities for its future development, both in terms of its internal structure and its external engagement with academia and the community at large. The report will provide the University with a valuable tool to guide its future development.

The report reveals a university, which has a sound administrative infrastructure and well-trained staff with a long experience of developing higher education. While there is a strong emphasis in the report on changes in internal organisation, decision making processes and institutional management, the Peer Review Team found it difficult to determine how far these structures were a cause or consequence to the progress that the Uni-

versity has made to date. We noted that the University has gained on international reputation as an innovative or entrepreneurial university (Burton R. Clark: "Creating Entrepreneurial Universities: Organisational Pathways of Transformation", Pergamon Press, 1990). However, we felt that in many respects this emphasis on administrative process took precedence over matters of substance regarding academic priorities and future direction. In short, we would have liked to have seen a stronger academic ownership of the self-evaluation report.

At our site visit the Rector set out the mission of the University in terms of four statements relating to its development strategy:

- A multi-disciplinary teacher education programme, which trains teachers for all levels of the education system
- Teaching and research pertaining to forests, other renewable resources and the environment
- Proficiency in the development and application of high technology
- Teaching and research relating to the social and cultural development of the European fringe areas and border regions.

However, the links between this strategy and the regional agenda in the self-evaluation report were not well made. More specifically the University assets and liabilities were not systematically assessed; many statistics were provided but only described, not analysed; the treatment of the regional definitional questions was somewhat diffuse; issues about the division of labour between the Joensuu and Savonlinna campuses, and between the University of Joensuu and the other universities in Eastern Finland, were hidden in the text; and policy issues about research niches and their potential to strengthen teaching and the role of the campuses in cultural matters were not elaborated upon.

Notwithstanding these caveats, the Peer Review Team are of the opinion that the material including the self-evaluation report can provide valuable raw material for a wide ranging discussion within the academic community about the University's future direction. Our workshop in Savonlinna indicated that this process has already begun.

The regional mandate

The Peer Review Team understand that the original mission of the University of Joensuu was, together with the other two universities, to provide a stimulus for the development of a region called "Eastern Finland". It was also to be a two-campus institution. However, in the self-evaluation report, the regional mandate is sometimes confined to North Karelia. Occasionally Mikkeli is mentioned, as is Kuopio province. When taken together, these three areas comprise the new province of East Finland, established in 1997. However, at the time of foundation, Kymi province, where Lappeenranta University of Technology is located, also constituted part of Eastern Finland. To what extent has Joensuu University served this wider region?

In terms of student enrolment, North Karelia is the province within Eastern Finland with the highest proportion of students attending any of the three universities-77%. The corresponding figures for Kuopio and Mikkeli are 10 lower and for Kymi 25 lower. Looking at the same statistics from an institutional perspective we see that Joensuu recruits 72% of its students from the four eastern provinces. Since 1986 the proportion of students recruited from North Karelia has increased from 26% to 39%, while the share from other parts of Eastern Finland has declined (for example a reduction from 28% to 20% of the total for Kymi and Kuopio taken together). In summary, and solely in terms of student recruitment, Joensuu is the most regionally embedded of the three universities. Within Eastern Finland it has become more localised in its pattern of student enrolment over the past 12 years and its wider regional influence has declined. Having said this, we would not recommend that the University seek to increase either its regional or local enrolments if it is also to maintain its position as a national and international institution.

Faculty structure and academic programmes

What of the output side in terms of the supply of graduates to the regional labour market? The answer to this question is likely to be related to the academic profile of the University and the programmes chosen by students on enrolment. Here the original concentration on teacher training has gradually been widened by the introduction of new subjects. To some extent these new subjects have supported teacher training, since the main responsibility for the preparation of teachers at the upper end of the school system lies with the academic disciplines within the humanities and science faculties. In addition, that is where the students concerned are allocated for statistical reporting purposes even though they also take courses in the Faculty of Education. At the same time, the presence of these subjects has offered graduates alternative exits to the labour market as well as new opportunities for basic and applied research.

Alongside teaching, a number of departments and faculties have undertaken activities linked to their research through which they have provided a source of competence for the region. For example the Faculty of Forestry has persuaded various national and international organisations to undertake projects which involve industrial co-operation within the region; the national Centres of Excellence in Mathematics and Physics have had an impact on education in the region's schools, raising competency levels in key subjects relevant to a wide range of occupations and industries. The University's expertise relevant to engagement with Russia has been used by a number of regional organisations; likewise knowledge based on education about the application of information and communications technology. But these are exceptions; as the self-evaluation report admits "the international links and disciplinary-based commitments tend to dominate the regional ones in the academic values (of the university)".

Examination of the student statistics reveals a significant decline in the share of student enrolments in the Faculty of Education (i.e. primary education) over the ten years up to 1996 (from 40% to 28% of the total). At the same time the share of the Faculties of Science and Social Sciences increased by 6 and 7 respectively. These shifts reflect a diversification process, which is welcomed by the Peer Review Team. But how far has this diversification benefited the regional labour market?

The descriptive statistics presented in the Appendix of the self-evaluation report suggest that the four eastern provinces provided employment opportunities for 62% of all graduates from the University who graduated in the period 1990–93. These figures increased by four since the period 1985–89. North Karelia attracted most graduates (28%), followed by Kymi (12%), Mikkeli (11%) and Kuopio (10%). Taken together these figures suggest a significant contribution to enhancing the skills and knowledge base of the workforce of Eastern Finland. However, comparing them with the pattern of student recruitment does suggest that the University is a small net exporter of human resources (72% of enrolments are from Eastern Finland and 62% of graduates remain in the region).

From the statistics it is not possible to determine the influence of programme choice on the geographical destination of graduates. Nevertheless, a useful proxy is provided by the sector of employment. Here we find that in 1990–93, 68% of all students graduating from the University of Joensuu entered employment in the local government sector and 22% in central government. The private sector's share was—self-employed people include—only 10% which had fallen from 17% in 1985–89. Moreover, only 2% of graduates entered self-employment, compared with 6% five years earlier. Finally, in terms of occupation, 66% of graduates entered the education profession, and 11% social welfare services.

These figures could be read as suggesting that the University has not significantly contributed to diversifying the industrial and commercial base of Eastern Finland. It would appear that its academically orientated subject profile serves the very important role of supporting the regional welfare state. These are tentative conclusions and the Peer Review Team would recommend that the University carefully considers its student enrolment and graduate statistics in relation to its regional mission.

The Continuing Education Centre

Around its mainstream teaching and research programmes, which have a strong academic discipline orientation, the University has developed a number of organisations and activities focusing on the development of North Karelia. These activities comprise research, education and general scientific information services. The Continuing Education Centre with five different sections, including the Open University, is the unit with the greatest potential regional significance.

The Peer Review Team came to the view that the University has many separate regionally relevant initiatives, which are not systemically connected to the University through a strategic link. The Continuing Education Centre could be a co-ordinating or integrating force if its management and governance were directly connected to the basic organisational

structure of the University. Even its own activities are not always seen as an integral part of normal university activities. Because communication channels along which ideas and experience could flow between the Centre and the academic departments are not well developed, the departments are starved of a potential source of innovation. Moreover, the Centre is unable to check the academic standards of its courses and other activities. The Peer Review Team therefore recommend that the University undertake a systematic review of the way in which academic departments interact with the Centre with a view to it providing a more systematic means of maintaining regional engagement.

On Savonlinna

One particular responsibility of the University of Joensuu is its contacts with the province of Mikkeli through the campus in Savonlinna. However, the University is not yet operating as an integrated two-campus university. This is probably one important reason why it does not use, and sometimes even does not understand, the opportunities which regional engagement can provide. Furthermore, this is also an interesting example of the relation between internal and external aspects of the performance of the University. The Peer Review Team therefore regard the existence and the features of the Savonlinna campus as a particular opportunity for the future development of the University and its regional role. This could embrace increased dialogue with the Mikkeli Polytechnic, the HSE's Centre for Small and Medium Size Enterprises, Lappeenranta University of Technology and the extension activities of the University of Helsinki in the area.

We found that staff and students at the Savonlinna campus perceive their situation as separated from the University (as indicated for example by their low participation in the self-evaluation process). There seems not to be an equivalence between the campuses in terms of financial units of resource; students in Savonlinna have very restricted course choices and there is no frequent exchange of teachers with the main campus.

The two-campus issue is connected to the original mission of the University. A constructive solution of the two-campus phenomena has very much to do with trust, especially between academics and politicians but also internally between different groups of staff. Many universities around the world are developing as multi-campus institutions and the University of Joensuu could develop an interesting basic structure building on such experiences.

A general characteristic from successful multi-campus universities is that all sites must be regarded and defined as parts and resources of one united entity (for example the Swedish Agricultural University with several campuses around the country). In general, it seems to be important not to create organisational splits based on geographical circumstances.

There can be at least two different approaches to such a situation: an intra-campus or cross-campus faculty. The Peer Review Team are hesitant to suggest a specific faculty for Savonlinna as it currently has only two departments with very little in common either in disciplinary or vocational

terms—faculties need to be created in terms of programmes, disciplines or

professional areas.

In the absence of any major faculty reorganisation, The Peer Review Team recommend a conscious effort to make the Savonlinna campus attractive in a national perspective. The campus could, for example, be made more diversified through introducing additional programmes. It could also be used for unconventional activities, for instance complementary to the traditional output of the university system. The national coordination of tourism programmes is a good example of such an approach.

Furthermore, we recommend that the University create incentives for the exchange of teachers and even students between the campuses. Within the field of teacher training the programmes of the campuses are complementary so an exchange should be relatively easy. In a similar way the Peer Review Team recommend testing different ways of mutual use of the competencies of the translation programme in Savonlinna and the philological programmes in Joensuu.

On Russia

The University of Joensuu has a long tradition of co-operation with the Russian part of Karelia. The documentation of this reveals interesting results and demonstrates new opportunities for future endeavours. In particular the University has developed a niche profile in teaching and research about the culture of its eastern neighbour. An enlarged orientation towards Russia should also provide interesting opportunities for co-operation with the universities in Kuopio and Lappeenranta as the three universities are complementary in focus. Together these universities have both opportunities and responsibilities to focus on the adjacent parts of Russia.

There could certainly be a number of synergistic effects if these universities jointly developed support functions in this field—duplicating such functions is not an efficient way of using resources. However, the challenge is to find ways of co-operation in specific activities and in combining skills and competencies from the different universities. For instance a programme in entrepreneurship could be developed through the business oriented resources in Lappeenranta in combination with the knowledge of cultural issues in Joensuu.

Together with the sister universities the University of Joensuu could play a liaison role within the Finnish university system as a whole for supporting and developing contacts with Russia. For the Eastern Finland universities an effect of this could be to develop an intermediary role and a network administration for supporting the needs and interest coming from neighbouring parts of Russia. However, realising the total potential in Russia will, in the long run, require a very large effort from many different participants and many different universities.

On strategic planning

One of the key challenges the University faces is how to find new combinations within the institution and new partnerships with outsiders, both academic and non-academic, that can stimulate its long term development. We would particularly stress the importance of identifying needs in society, including regional needs, and transferring these into teaching and research programmes. As there are a number of possible routes to follow, a strategic plan is an essential requirement to chart the way forward for the University. With regard to the regional dimension for such a strategy, the University has made an important first step in its self-evaluation report. The next step should be to use this as part of a SWOT analysis undertaken through inter-disciplinary seminars, workshops and other activities, which identifies internal strengths and weaknesses and external opportunities and threats.

External relations

From its own SWOT analysis the Peer Review Team have come to the view that the University of Joensuu needs to strengthen its relation to different sectors of society, both nationally and regionally. We judge that given the largely academic/public service profile, the University will need political backing to protect its basic funds. Put another way, there is a need for a better understanding on the part of politicians from central government and the public at large of the situation confronting a small, non centrally located but broadly based institution. Further attention to the region as a whole, including its politicians and administrators, could enhance the strategic position of the University. The University must make the case that the region needs it and it needs the region.

Having said this, the university will have to demonstrate that it has created mechanisms for responding to societal demands—it is insufficient to simply assert adherence to the present academically driven priorities. Throughout history, successful universities have adapted to changes in society without abandoning long term academic integrity. The University of Joensuu has a number of opportunities to develop external networks through which it can achieve a better understanding of its role and learn how it can enhance its planning process and overall performance.

In these respects the Peer Review Team believe that local and regional networks have an important role to play. We noted that the relationships between the university and everyday society in Joensuu was not very close; indeed we gained the impression that politics and industry are a bit alien to the inner world of the University. In contrast we found well developed international networks, access to which could be of immense benefit to the local economy and society. Experience elsewhere suggests that global networks and local engagement can be mutually enriching processes. In summary, The Peer Review Team recommend that the University pay greater attention to strengthen its external relations and drawing upon these links to guide its strategic planning.

The future direction of the University and mechanisms for management change

The Peer Review Team gained the impression that the University of Joensuu aspires to be an elite, broadly-based and research-orientated institution covering education, humanities, science and the social sciences. We know that some newer European institutions to which Joensuu has associated itself, notably the University of Warwick in the UK, have challenged the big traditional universities to become successful research-led institutions. But we also know that research universities are expensive to run and good research universities are more expensive still. The challenge is to be selective and ascertain how regional engagement can support that objective.

Selectivity need not be synonymous with a single discipline specialisation. Because it includes a large number of disciplines, the University of Joensuu has the potential for strong multi-disciplinary teaching and research programmes. These could embrace a regional orientation, not least because the area of Karelia in particular, and Eastern Finland more generally, has a special national and international significance. Given the role of teachers in developing strong regional cultural identities, there are opportunities to link this area to the overall strategic priorities.

But how can such opportunities be realised within the framework of the University's current management processes? Are there overarching ideas that transcend the whole institution, or are a number institutionally sub-optimal orientations being developed such that the whole university is not more than the sum of its parts? In addressing these questions the Peer Review Team reluctantly concluded that the University's administrative processes could inhibit the future development of the institution. We gained the impression that formulae mechanisms for internal resource allocation could reinforce existing structures and not create sufficient capacity for new strategic initiatives. More specifically, administrative processes seem to have become detached from the academic development process. The Peer Review Team therefore recommend that the University review the links between its internal resource allocation process and its long term strategic planning in order to ensure that it has the capacity both to create and respond to strategic opportunities including those arising from within the region.

Conclusions

Our over-riding concern about the University of Joensuu is the absence of any meaningful strategic plan to guide its future academic development, particularly its relationship with the region. Because it has not fully developed its mechanism for engaging with wider society, we believe the University is denying itself external inputs to its forward thinking about teaching and research priorities. Following from this dialogue the strategic plan should identify priorities, combinations of academic fields and competencies and sustainable mechanisms for serving society. This plan should be

subscribed to by the University at large, not just the administration, and then be used to guide resource allocation.

The Peer Review Team recommend that a strategic plan be developed that also includes mechanisms to support:

- The integration of the Savonlinna and Joensuu campuses
- The identification of the region with the University
- Dialogue with the other universities in the region, especially their Centres of Training and Development
- A resource allocation process linked to strategic priorities
- The quality assurance of the strategic planning process itself.

We recognise that the tenor of this report is less positive than that provided by Burton Clark in his recent publication. However, that analysis did not consider the regional role of the university. In our experience, the requirement for regional engagement, and with society more generally, poses an additional challenge for the management of higher education institutions. We hope our report will assist the University of Joensuu address these challenges.

Recommendations

- 1. The Peer Review Team recommend that the University pay greater attention to strengthen its external relations and drawing upon these links to guide its strategic planning. We also recommend that the University review the links between its internal resource allocation process and its long term strategic planning, in order to ensure that it has the capacity both to create and respond to strategic opportunities including those arising from within the region.
- 2. The Peer Review Team share the opinion that functional links between the Centre of Continuing Education and the academic departments are not good. We therefore recommend that the University undertake a systematic review of the way in which academic departments interact with the Centre with a view to it providing a more systematic means of maintaining regional engagement.
- 3. The Peer Review Team recommend a conscious effort to make the Savonlinna campus attractive in a national perspective. The campus could, e.g., be made more diversified through additional programmes. It could also be used for unconventional activities, for instance complementary to the traditional output of the university system. We also recommend that the University create incentives for the exchange of teachers and even students between the campuses. In a similar way the PRT recommend testing different ways of mutual use of the competencies of the translation programme in Savonlinna and the philological programmes in Joensuu.

- 4. As the most broadly based university in Eastern Finland we recommend that the University of Joensuu take the lead in co-ordinating an inter-university response to the academic opportunities arising in Russia.
- 5. In recent years, the University of Joensuu has become more localised in its pattern of student enrolment and its wider regional influence has declined. On the employment side we found that the private sector's share has fallen to 10% and only 2% of graduates enter self-employment. We therefore recommend that the University carefully consider its student enrolment and graduate statistics in relation to its regional mission.
- 6. In summary, the Peer Review Team recommend that a strategic plan be developed that also includes mechanisms to support the integration of the Savonlinna and Joensuu campuses; the identification of the region with the University; dialogue with the other universities in the region, especially their Centres for Training and Development; a resource allocation process linked to strategic priorities; and the quality assurance of the strategic planning process itself.

ANNEX 1

QUESTIONS FOR INTERIOR MINISTRY AND LABOUR MINISTRY

By the Peer Review Team to evaluate the regional role of the Eastern Finland Universities

- 1. What is the role of the Centres of Expertise attached to the universities in Eastern Finland in raising the competitiveness of the region?
- 2. What is the expectation of the university based Centres for Training and Development in enhancing the skills of the working population in Eastern Finland?
- 3. How is central government action with regard to the role of the universities in economic and social development co-ordinated between ministries at regional level?
- 4. Is there a central government interest in the contribution municipalities and regional councils make to universities in support of their local and regional missions?
- 5. Who is responsible for the preparation of regional human resource development strategies?
- 6. What role is expected of the universities in shaping European Regional Development Fund priorities (single Programming Document) and future bids (Agenda 2000)?
- 7. Are you satisfied that the portfolios of teaching and research in each of the universities in Eastern Finland are sufficiently focused to meet the development needs in the region? If not, what steps could/should your ministry take to remedy the situation?

ANNEX 2

EMBEDDING REGIONAL ENGAGEMENT IN INSTITUTIONAL MANAGEMENT PROCESSES

1. The Strategic Planning Process

- How can we undertake a regional SWOT analysis in collaboration with the development authorities?
- What is the distinctive contribution of our institution to the regional agenda? What are the unique features of the region to which we can make a contribution? Are there new teaching programmes that need to be created?
- How can we handle the regional dimension in our internal planning process (e.g. regionally relevant targets)?
- How should planning be done? Who should be involved? How should the plans be disseminated? How should plans be linked to resource allocation?
- What mechanisms need to be created to monitor progress against plan?

2. Human Resource Development

- How can the regional dimension be incorporated into our HR policies? What specific training should be given to staff with the responsibilities for regional affairs?
- How should our policy for staff recruitment and retention be influenced by regional concerns?
- How can we support global engagement <u>and</u> local linkage (e.g. external visitors, overseas travel, sabbaticals, joint appointments with local organisations)?
- How should our staff be rewarded for regional engagement?

3. Financial Management

- How should regional and national funding be handled internally (e.g. pooling versus separation)?
- What mechanisms do we require for monitoring expenditure against budget?
- How can we create resources for strategic and responsive regional initiatives?
- Are we creating sufficient surpluses from overhead recovery?

4. Student Management

- What should we do to increase regional recruitment?
- How should we accredit prior learning?

- How should student progression (guidance and course choice, work placements and project selection) be guided to reflect individual and regional needs?
- How can we use regional labour market intelligence to influence the shape of teaching and learning?
- What mechanisms can we create to match employers with graduates?
- How can we use alumni in the above processes?
- Is there a role for student unions?
- What can be done to improve student living in relation to the city?
- 5. Institutional Arrangements
- What should be the role of organisations like our Centre for Training and Development?
- How can the priorities of such bodies be set in relation to those of academic departments?
- How should they be funded, e.g. the balance between core and contract income, contracts with departments and/or individuals?
- 6. Relationship Management and Leadership
- Are the objectives of our partnerships clear, including the role of the institution within them?
- How can our regional partnerships be sustained and who has responsibility for this task?
- What are our mechanisms for dialogue—who talks to who about what?
- How are regional needs communicated through our institution?

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To be regional, national or international—that is the question three Eastern Finland universities have tackled using both similar and different strategies. In this publication the international Peer Review Team reports the results of external evaluation carried out in Lappeenranta University of Technology, University of Kuopio and University of Joensuu. The evaluation was based on the self-evaluation reports produced by each university, the discussions and findings discovered during the site visits, and complementary information produced by the institutions. The theme of the evaluation was the regional role of the three universities. This dates back to the time of their foundation—after a long and hectic political debate, the final solution in 1966 was to found three separate, more or less specialised units instead of one "full-service" university to meet the regional needs of the eastern part of Finland. How well they have reached the aim is the topic of this report.

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