HIGHER EDUCATION AND **COOPERATION** WITH THE SURROUNDING COMMUNITY

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HIGHER EDUCATION AND COOPERATION WITH THE SURROUNDING COMMUNITY

Högskoleverket 2005

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Preface

Quality in higher education in Sweden involves many factors. It goes without saying that the quality of the programmes in terms of teachers' qualifications, good syllabuses and links with research is very important. However, before anything can be said about the overall quality at any institution several aspects need to be taken into account, of which one, for instance, is how well it cooperates with the surrounding community.

The National Agency for Higher Education has previously evaluated the work of the higher education institutions in the areas of gender equality, student influence and social and ethnic diversity. Now it is the turn of the quality of their cooperation with their surrounding communities, often referred to as the third task of higher education, together with research and teaching. The internationalisation of undergraduate and graduate programmes in Swedish higher education was also evaluated during 2004.

The interaction of the higher education institutions with their surrounding communities is by its very nature extensive and comprises many different aspects. Not least important is the international arena in which higher education operates today. The National Agency for Higher Education will continue to pay attention to this form of cooperation in an international study during 2005.

The findings of this evaluation reveal among other things that higher education institutions have made a great deal of progress but that there are areas where further development is possible.

This evaluation will be followed up in 2007. I expect that we will then be able to focus on the outcomes of the work of the higher education institutions in this area.

Sigbrit Franke
University Chancellor

Maria Lönn
Project Manager

Summary

The aim of this evaluation was to provide perspectives and knowledge about the ways in which higher education institutions cooperate with the communities around them. Another objective was to contribute to developments within this field. The evaluation also involved identifying the higher education institutions at which this cooperation is most effective.

The Higher Education Act has contained a stipulation on interaction with the surrounding community since 1997:

> "The institutions of higher education shall also cooperate with the surrounding community and give information about their activities."[1]

This evaluation reveals that cooperation is undertaken with different objectives: to enhance democracy, to stimulate the development of knowledge and growth and to improve educational programmes. The higher education institutions cooperate with the general public, the commercial and public sectors and various organisations.

The results of the evaluation show clearly that many higher education institutions have effectively integrated this cooperation into their research and teaching. Cooperation with the surrounding community has undergone considerable development during the last ten years. But nothing is so good that there is no room for improvement.

It is clear that there are often shortcomings in the routines for monitoring these endeavours. A better system of incentives would make it easier for the higher education institutions to cooperate with the community.

Less priority has been given in recent years by both the authorities and the higher education institutions to the forms of cooperation intended to enhance democracy. It is important to restore the status of this objective.

1 Higher Education Act, 1.2 (1992:1434)

Introduction

Higher education institutions have been cooperating with the community for many years. This is the first systematic evaluation undertaken in Sweden of the work of the higher education institutions in this respect. The aim of the evaluation, which has been initiated by the National Agency for Higher Education, is to offer a perspective on the form taken by this cooperation and to provide knowledge about its outcomes. The evaluation is also intended to contribute to the development of cooperation with the community. A national and comparative perspective has been adopted in the evaluation. It has also involved identifying the institutions that can demonstrate that they have the best approaches.

The evaluation has been assisted by a panel of assessors consisting of representatives of the higher education institutions and also of those with whom the institutions cooperate.[2]

The National Agency's quality evaluations

The National Agency for Higher Education promotes the continuous development of quality assurance procedures at higher education institutions. Its intention is to ensure that procedures for assuring and improving quality are reviewed constantly. One element of this process has comprised audits of the quality assurance systems at the higher education institutions. So far two rounds of these audits have been conducted.

Since 2001 the National Agency has also been carrying out the task it was given by the government of evaluating all the subjects and programmes offered in higher education in Sweden. This evaluation covers both undergraduate and graduate programmes.

Another form of review undertaken by the National Agency comprises the "thematic quality evaluations". The aim of these evaluations is to describe and appraise the actual situation for some specific quality aspects or "themes" that are admittedly dealt with in the other evaluations but are not the main focus of their appraisal.

2 The panel of assessors has consisted of Mårten Carlsson (Prof. em., Vice-Chancellor of the Swedish University of Agricultural Sciences 1982–94), Peter Johansson, (responsible for R & D issues at the Confederation of Swedish Enterprise), Maria Lönn (National Agency for Higher Education, also project administrator for this evaluation) Katrin Sjunnesson (Swedish National Union of Students), Christina Skantze (Head of the Structural Fund Unit at NUTEK, the Swedish Business Development Agency) and Lena Wollin (Information Officer at the Swedish Research Council). Administrative support has been provided by Margot Wojdas (National Agency for Higher Education).

One way in which these differ from the Agency's other evaluations is that direct comparisons are made between the institutions to enable identification of those that function best.

During 1999 the National Agency conducted thematic quality evaluations of the way in which the higher education institutions deal with gender equality, student influence and diversity. The great attention these findings attracted gave rise to debate of these three areas and led to the adoption of a number of measures, as was made clear not least when the evaluations were followed up during 2003.

This evaluation of the cooperation of the higher education institutions with their surrounding communities is an example of a thematic quality evaluation.

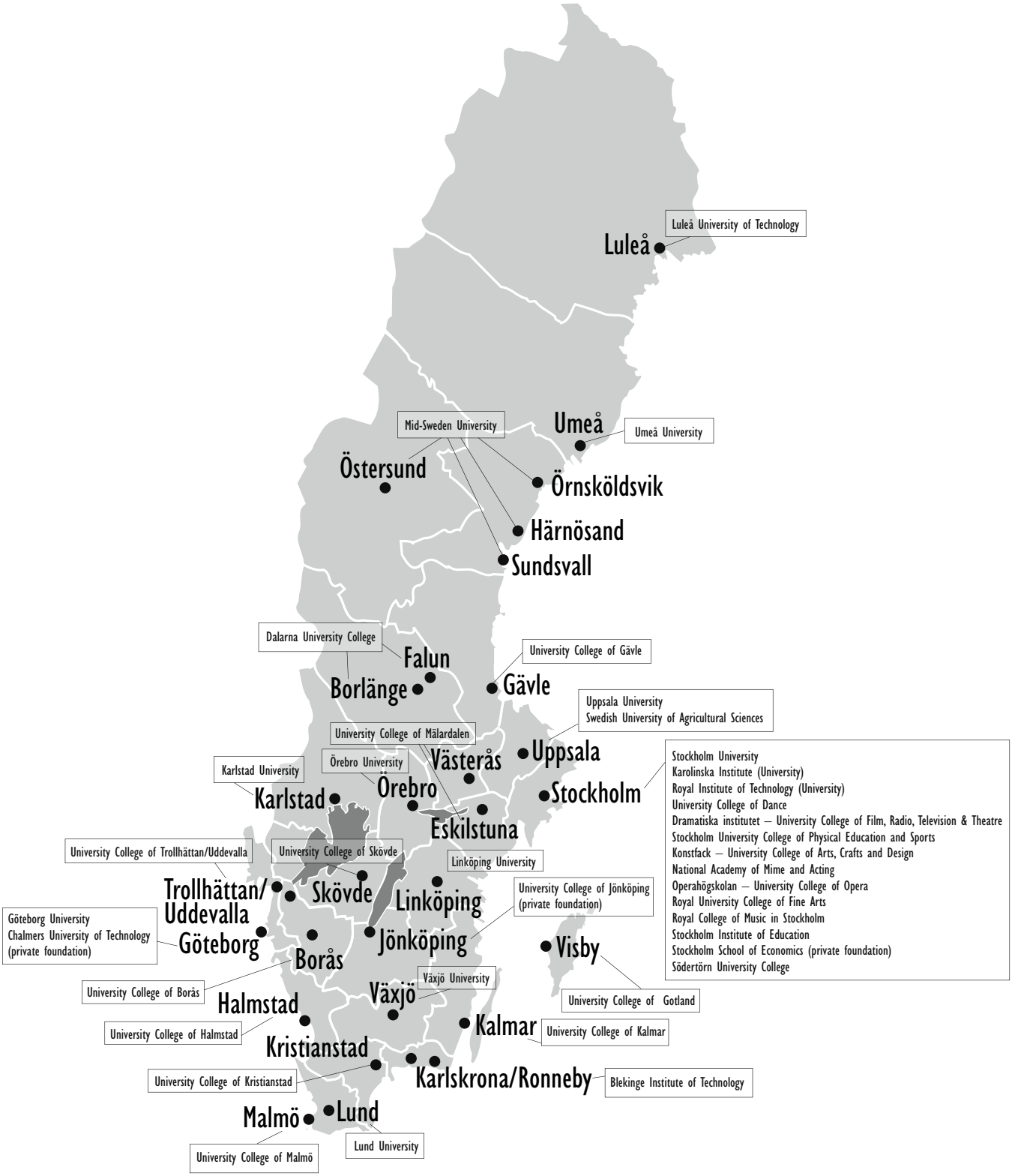
Higher education in Sweden

In Sweden the Riksdag and the government have the overall responsibility for higher education and research. The Riksdag and government lay down the regulations that are to apply to higher education. They also determine the objectives, guidelines and allocation of resources for the sector. A number of agencies play an active role in the field of higher education, of which one is the National Agency for Higher Education.

Teaching and research takes place at the higher education institutions

In Sweden there are 39 major universities and university colleges. The state is responsible for the management of 36 of them. The main tasks of the higher education institutions is teaching and research together with cooperation with the surrounding community. Much of the research funded by the state is conducted at the higher education institutions.

Higher education institutions in Sweden



Undergraduate programmes

The objectives for higher education in Sweden are laid down in the Higher Education Act and the Higher Education Ordinance. These stipulate that all higher education is to be based on academic or artistic principles and on tested experience. Programmes are also to provide students with knowledge and skills in the discipline in which the programme is offered. They are also to equip students with

- the capacity to make independent and critical judgements
- the capacity to solve problems independently as well as
- the capacity to face changes in the labour market.

All higher education must be of a high standard. The higher education institutions are responsible for developing and assuring the quality of their programmes.

Graduate programmes

Graduate programmes are offered in Sweden by the universities and also by higher education institutions that have been empowered to award graduate degrees. Institutions with university status have a general entitlement to award graduate degrees, other higher education institutions are entitled to award graduate degrees in the disciplinary area or areas for which this right has been granted.

Research

The state is responsible for basic research and for graduate courses. The aim of Sweden's research policy is to make Sweden a leading research nation where research maintains a high scientific standard. Sweden is to be one of the world's most research and development intensive countries and its research is to be both broad and specialised. Nearly four per cent of Sweden's gross domestic product (GDP) is devoted to research and development.

State-funded research is carried out by the higher education institutions. Most of this research is undertaken at the higher education institutions. Since 1997 all higher education institutions have been allocated fixed research resources. Most research is funded by the public sector.

The boards of the higher education institutions are responsible for the research environments

The boards of the higher education institutions are responsible for the conditions they offer for research. The boards make decisions on strategic investments and the reallocation of priorities. The boards are also to stimulate the institutions to adopt profiles and to initiate national and international evaluations of the research they undertake.

Additional information about the National Agency and higher education in Sweden

More information about the National Agency for Higher Education, higher education in Sweden and addresses to the web-sites of higher education institutions in Sweden can be found on the National Agency's web-site at **www.hsv.se**.

Sweden's public sector web-site **www.sverige.se** contains information about the agencies and research councils that support cooperation with the surrounding community.

Approach and layout

The cooperation of the higher education institutions with the world around them is multifaceted, complex and constantly changing. As our point of departure we have adopted the wordings used by the Riksdag and the government in statutes and draft legislation to lay down how the higher education institutions are to cooperate with the community. In these documents we have discerned three objectives for this cooperation:

- Cooperation to enhance democracy.
- Cooperation for the development of knowledge and growth.
- Cooperation to improve educational programmes.

This has enabled us to take a constructive view of this cooperation even though no clear demarcation lines can be drawn between these areas.

We have concentrated on the general features that we consider characterise the process of cooperation and the ways in which these endeavours can be improved. It has been important to recognise whether the higher education institutions view cooperation as something that supports or competes with their research and teaching. It has also been important to study how the institutions strike a balance between the increased transparency required and their academic integrity. We have been interested in how cooperation has developed during the last decade as well as how the institutions have responded to changes and which actors they consider have provided support during this period.

Questionnaires and meetings – the data for our evaluation

The evaluation has comprised 39 higher education institutions.[3] The material on which we have based our evaluation consists of written submissions from the institutions and information garnered during the meetings held with their representatives. The written material is mainly composed of responses to our questionnaire on issues relating to cooperation with the surrounding community.[4] At the meetings the higher education institutions were represented by their vice-chancellors, senior administrators with particular responsibility for cooperation, officials and teachers with specific expertise, as well as students. Almost all the meetings included one or two student representatives.

3 These are the 39 institutions listed in the section headed "Higher Education institutions in Sweden".

4 See appendix.

Cooperation – the concept and its development

The degree of social relevance required or expected of the activities of higher education institutions has varied over time. Since 1997 cooperation with the surrounding community has been stipulated by the Higher Education Act:

> "The institutions of higher education shall also cooperate with the surrounding community and give information about their activities."

The government and the Riksdag have required cooperation between the higher education institutions and their surrounding communities both before and since the inclusion of this provision in the Higher Education Act in 1997. The authorities have also provided support to higher education institutions through various initiatives to enable them both to comply with the demands and also to live up to the expectations of stakeholders in their immediate proximity. In what follows we shall concentrate on describing the demands placed on the higher education institutions by the authorities and the initiatives adopted to provide support from the end of the 1970s until the beginning of 2004.

The demands made of higher education institutions

1970s – emphasis on research communication

One effect of the 1977 reform of higher education was the establishment of new university colleges with no permanent research organisations. At the same time a new system was introduced in which the boards of the higher education institutions were required to have external members. The new Higher Education Act also contained provisions about the cooperation of the higher education institutions with the community. Emphasis was placed on disseminating the results of research and development, i.e. research communication. During the 1980s a number of measures were adopted by the government to enhance the beneficial impact of the higher education institutions on their surrounding communities.

1997 – cooperation with the surrounding community a statutory requirement

The current wording of the stipulation on the cooperation of the higher education institutions with their surrounding communities was added to the Higher Education Act in 1997. The main inspiration for this new statutory requirement came from one of the government's public enquiries entitled *De-*

riving benefits from research findings, cooperation between higher education and the commercial sector.

After 1997 – specifying what was required

The government defined these requirements in both the bill proposing the legislative amendments and in a number of bills in the following year. The main points are accounted for below.

- One of the tasks of research is to provide answers to questions of social importance.
- The higher education institutions have a role to play in providing different forms of information in the regions – through their libraries for instance.[5]
- Cooperation should take place within the framework of the resources normally allocated.
- One of the intentions behind the expansion of the small and medium-sized higher education institutions was to encourage cooperation with the community.
- The higher education institutions are responsible for ensuring the conditions that will enable benefit to be derived from the knowledge generated by research. In practice this means that the higher education institutions should provide counselling on issues relating to patents, for instance, or commercial law, at least at an overall level.
- Broadening recruitment is included in the task of cooperating with the surrounding community.
- The dialogue between the higher education institutions and individual citizens (the general public) should be regarded as a democratic issue. The higher education institutions have an important role to play in popular education. The institutions should assume increased responsibility for the development of this dialogue with the community and make it easier for both private individuals as well as companies and organisations to find the information they are looking for.
- Amendments were made to the Higher Education Act so that experience of cooperation with the community was viewed as a qualification when teaching staff were recruited or promoted.
- The higher education institutions have to cooperate with their surrounding communities without jeopardising their own integrity.
- The cooperation of the higher education institutions is to embrace the entire surrounding community, i.e. not merely companies and the commercial sector but also local authorities, county councils, public agencies, organisations and the general public. One particularly important group consists of teachers in primary and secondary education.

5 Regulations have also been introduced in the legislation that governs publicly funded libraries.

- Undergraduate programmes should also be involved in cooperation with the surrounding community. This should play a role both in the organisation of programmes to increase contact between students and the community and also in helping to ensure that their contents match the knowledge and competence demanded in the labour market.
- Cooperation should also take place in areas in which traditionally it has occurred less often, such as the social sciences and fine arts.
- Through their holding companies, the higher education institutions should simplify and facilitate the commercialisation of research findings and ideas
- Cooperation with the surrounding community should become an integral element in research and teaching programmes.
- The higher education institutions should participate in regional growth programmes.[6]
- Commissioned courses are also included in the task of cooperating with the surrounding community .[7]

On a number of occasions the government has stipulated that the higher education institutions are to develop strategies and action plans for their cooperation with the community. Monitoring takes the form of requiring the institutions to account for the measures that have been adopted as a result of their strategies and action programmes. From 2003 and onwards all the higher education institutions will have to report once every four years to the government on the ways in which cooperation takes place. In addition they will also have to provide an account of how their cooperation with the surrounding community is evaluated and followed up.

Support for the higher education institutions

The authorities support the higher education institutions indirectly. i.e. through public agencies and foundations. The higher education institutions receive no direct economic support from the government or the Riksdag for their cooperation with the surrounding community.

1990s – support for commercialisation begins to take form

At the beginning of the 1990s initiatives were taken to enhance the direct social relevance of the higher education institutions. This gave rise to the establishment of structures to support this process: at about ten institutions holding

6 The regional growth programmes are one element in the overall government strategy that economic policy measures are to be based on the conditions that prevail in the region concerned.

7 What characterises commissioned courses is that fees are charged for these programmes, unlike higher education in Sweden in general. The participants are nominated by the companies or agencies that provide the funding. Private individuals are not allowed to procure commissioned courses.

companies were created, primarily in order to commercialise research results, and foundations were established to enhance the transfer of knowledge and cooperation between the higher education institutions and the community, often the commercial sector. These foundations are Mistra (The Foundation for Strategic Environmental Research), The Swedish Foundation for Strategic Research, the Knowledge Foundation, as well as a number of Technology Transfer foundations.[8]

During the latter half of the 1990s the activities of the research foundations continued. Specific initiatives were intended, for instance, to increase cooperation between the small university colleges and the commercial sector.

Since 1995, Sweden's membership of the EU has also had significant impact on the cooperation of the higher education institutions with their surrounding communities. For instance, finance provided by the structural funds has stimulated regional cooperation while funding from the framework programme has financed projects involving partnerships between higher education institutions and industry.

2000s – continuing support for commercialisation

The first years of the new millennium saw a reorganisation of the ways in which research is funded, intended among other things to focus on innovation systems and needs-driven research. Special initiatives were also adopted to promote regional development. In addition, several more higher education institutions were offered the opportunity to establish holding companies.

The new research councils that were founded were the Swedish Research Council, FAS (the Swedish Council for Working Life and Social Research) and Formas (the Swedish Research Council for Environment, Agricultural Sciences and Spatial Planning). VINNOVA (the Swedish Agency for Innovation Systems) was created at the same time as the new research councils. The delegation for regional cooperation – a public agency with a short-term mandate – was set up to support regional cooperation in higher education to promote growth[9].

8 The activities of the Technology Transfer foundations were integrated when a new company Innovationsbron AB was founded on March 1, 2005.

9 It will cease to operate during the first half of 2005.

Cooperation – now a matter of routine

The task of cooperating with the surrounding community enjoined on the higher education institutions is clearly meant to be an integral element in their research and teaching. Cooperation is to be organised within the framework of the institutions' regular funding for research and teaching.

It is important for this cooperation to be developed so that it will not jeopardise the academic integrity of the higher education institutions. Their cooperation is to cover the entire community. The general public are important stakeholders.

A description is provided below of the features that characterise this cooperation and some general improvements are proposed.

An increase has taken place

The cooperation of the higher education institutions with their surrounding communities has increased in recent years. This is difficult to measure quantitatively but it is nevertheless clear that both more stakeholders and more groups of stakeholders are involved. The higher education institutions have adopted a variety of measures to create new fora to intensify cooperation.

The main explanation for the rise in cooperation may be the perception that it provides support for other activities and that the requirement in the Higher Education Act has increased its legitimacy. Other contributory causes may be the expansion of higher education, developments in IT and enhanced possibilities of external funding.

Support for other activities

The administrators of the higher education institutions feel that cooperation offers support for research and teaching. Many are also eager for the institutions to contribute to social development in some way.

At the higher education institutions there is a feeling among administrators that cooperation is integrated with their other activities. At administrative level no distinction is made any longer between this "third task" and their research and teaching. This could possibly be explained by the endorsement provided for this approach by the government and Riksdag.

However, some trepidation may be discerned among administrators at the higher education institutions about being called on to provide solutions to all the problems society faces. The new university colleges may consider this particularly difficult as they often have close links with their regions.

Our impression is that on the whole cooperation provides support for research and teaching. On the other hand, cooperation should not occur in

every phase of the research process or of a programme. Cooperation could then conflict with the objectives of the research or the teaching and therefore have a negative impact.

A threat to academic integrity?

Most higher education institutions are aware that cooperation may jeopardise academic integrity. There is however a widespread feeling that in their own operations a balance has been maintained between transparency and integrity – without any closer study of the circumstances. Some of the major universities have arranged formal discussion of these issues in order to remedy any potential shortcomings.

Major shortcomings could result in misgivings about the activities of an individual institution. If this becomes a frequent occurrence, it could, for instance, impair the general public confidence in research and higher education.

Our impression is that a balance must be maintained between transparency and academic integrity. The administrators of the higher education institutions should ensure that this balance is upheld and take measures to sustain it. One method might be to arrange discussion of the ethics of cooperation. In addition to the importance of these discussions in safeguarding academic integrity, they could also help to raise the legitimacy of cooperation with the community within the higher education institutions themselves.

The institutions would like augmentation of their resource

The higher education institutions consider that augmentation of their resources is required to enable them to develop their cooperation in accordance with the strategies and priorities they have adopted. Most of them feel that resources could be enhanced by raising the funding provided directly by the state for research and teaching. Others would like to see specific funding for cooperation. We have observed some ambiguity on the issue of funding. While most of the higher education institutions are anxious to view cooperation as a "natural element" in their teaching and research, i.e. something that cannot directly be distinguished from these activities, several institutions would like funding to be "earmarked" for cooperation.

The general public – forgotten stakeholders

Few institutions point out that the general public are important stakeholders. This may be because the general public do not constitute a well-defined group with which future projects can be discussed or contracts signed. Another explanation may be that the general public and activities aimed at the general

public, such as popular science, have been given lower priorities in recent years in favour of other kinds of cooperation.

Our impression is that the general public should be viewed as important stakeholders by the higher education institutions. This could, for instance, play an important role in maintaining public confidence in what they do.

Administrative measures to provide support

Various initiatives have been taken by the administrations of the higher education institutions to benefit from future possibilities and comply with the requirements of the Higher Education Act. Organisational support has been created for cooperative activities and strategic networks established with external actors. There has been extensive creation of strategic networks and this seems to have increased in recent years, perhaps as a result of the significant roles the higher education institutions have been given in regional development programmes.

A number of strategic alliances have recently been formed between the higher education institutions. Community expectations that there will be more cooperation and the increased demands entailed may explain this development of alliances. It is not however certain that cooperation can be organised effectively in a number of alliances. We consider that closer study is needed of the factors that lead to the success of a strategic alliance.

Support from many actors

The higher education institutions receive support from many actors in developing their cooperation with the community. This mainly takes the form of financial support. Almost always the resources are allocated to short-term projects.

We have observed that on the whole there is a dearth of actors providing support for those aspects of cooperation that concern research communication/popular education.

The higher education institutions have different possibilities

The scope open to the higher education institutions for cooperation varies. This affects how much success they achieve. The factors that we consider most important are the extent of applied research and volume of research. The reason why an institution was founded also plays a role.

Cooperation to enhance democracy

The task of cooperating with the surrounding community entrusted to higher education institutions also includes the provision of information about their activities. Trustworthy dialogue between researchers and the rest of the community, not least the general public, is a necessity.

The advances made by researchers arouse people's hopes about the possibilities they offer of resolving difficult problems but can at the same time also give rise to concern and a number of questions. One of the goals of research communication/popular education is increased awareness and more dialogue to enable people to participate in the democratic process and influence the development of research. We have focused on the way in which the higher education institutions work to maintain a dialogue between researchers and the rest of the community.

Part of our task has also been to identify the institutions that, on the basis of their circumstances, cooperate with the surrounding community most effectively in order to enhance democracy. These are Göteborg University, the University College of Trollhättan/Uddevalla and the University College of Mälardalen. Our assessment is based on:

- The extent to which there is information that makes the teaching and research undertaken at the institution generally available (web-site, printed material, media services, etc.),
- If research communication/popular education is considered as one aspect of cooperation with the surrounding community in development work, mission statements and organisational structures,
- The extent to which activities are arranged that enable dialogue with and the participation of the general public, children and young people, and also specific vocational groups,
- If recourse has been made to the institution for the provision of information on which political decisions may be based,
- If there are incentives and support to enable individual researchers to work with research communication/popular education,
- If the library is used as a resource for the institution's cooperation with the surrounding community.

An account is given below of what characterises cooperation to enhance democracy and proposals for the improvement of these endeavours.

Information activities for various purposes

The table below presents the impression we formed of the information activities of the higher education institutions. We consider it valuable to consider the activities accounted for here from the viewpoint of what the institutions

intend them to achieve. This aim ultimately determines their priorities and contents and can also have a decisive impact on how the information functions are organised. Both the table and the responses submitted by the institutions reveal that one specific activity may well serve several purposes. When an institution is following up these activities, however, it is important for the purpose to be kept firmly in mind.

Aim	**Profile**	**Recruitment**	**Research communication/popular education**
Examples of activities	Web-site • General information	Web-site • Information about programmes	Web-site • Popular scientific presentations • Question boxes and other inter-active services
	Printed material • Information brochures	Printed material • Course catalogues	Printed material • publications/books
	Journals/Magazines		
	Media services	Media services	Media services
	Trademark maintenance	Open Houses/Open lecture series Popular science days	Open Houses/Open lecture series Popular science days Educational seminars Scientific festivals/similar activities Scientific cafés/Philosophical circles, etc. Science theatre
		Graduate schools/summer schools Mentorship projects Science Centres	Graduate schools/summer schools Mentorship projects Science Centres
		School cooperation	Information for specific vocational groups
		Technological competition [10]	Setting up centres /similar activities
			Networks

Institutions are viewed as trademarks

The majority of higher education institutions have in recent years established very professional information units. The media offer an increasingly important channel. The main motive is to establish a profile for the institution and to recruit students. The concept of the institution as a trademark is referred to repeatedly in the institutions' own responses.

10 A competition in the natural sciences and technology for eighth-grade classes.

Being visible and being known regionally, nationally and preferably internationally as well is an important factor for success. The priority now being given in many institutions to marketing and to establishing a profile is almost certainly one outcome of the increasing competition for students and research funding.

Information and popular education/research communication – one aspect of cooperation with the surrounding community?

The higher education institutions do not always consider that information about their doings or research communication – in the sense of popular education – is one aspect of their cooperation with the surrounding community. It is referred to by only a few institutions in their descriptions of development, their organisation or the vice-chancellor's view of what is being done. One reason may be that the focus has been placed in recent years on cooperation as a means of growth.

It is important for information and research communication/popular education to form part of an institution's cooperation with its surrounding community in practice as well. This provides greater scope for people to participate in the democratic process and influence the development of research. Citizens have a legitimate claim to information about the use of state funding for research, and this in its term is required if the research is to gain legitimacy.

Inadequate support for researchers

Popular education remains a vital task mainly for the older institutions. These activities are based on the enthusiasm and commitment of individual researchers. Few institutions offer researchers any form of training in research communication/popular education. In practice this kind of activity is not considered a qualification when academic appointments are made. In some exceptional cases information activities are funded from external sources.

Many institutions refer to the responsibility they have for increasing public awareness of the social role of research. Involving people in debate about the priorities and conditions that apply to research is considered important for its legitimacy. We share this opinion but must at the same time point out that the administrators at the institutions often transfer responsibility for this task to individual researchers. No support is provided for them. Nor have we found this aspect of cooperation reflected in the forms of organisational support for cooperation with the surrounding community adopted by the administrations of the higher education institutions.

We consider that individual researchers should be offered greater support and more incentives so that these activities can be developed further. It is important for more institutions to offer their researchers training in research

communication/popular education than is currently the case and experience in this area must also in practice be considered a qualification for an academic career.

Recruitment initiatives provide contact with research

Children and young people are an important target group for most of the higher education institutions. There is extensive cooperation with the schools. The main aim is to recruit potential students, often from the perspective of raising interest in the natural sciences and technology. The impact is probably considerably broader. The measures undertaken mean that even young people who do not go on to higher education come into contact with research and its findings. This is an awareness that follows them throughout their lives. During recent years the support from the Recruitment delegation has had a decisive influence on these activities.

We consider it important for the higher education institutions to adopt a variety of measures targeted at children and young people, both in order to raise interest in proceeding to higher education and to promote greater understanding of what the institutions are doing.

Extensive in-service training

The higher education institutions offer extensive and varied programmes to specific vocational groups. These can take the form of in-service training programmes, seminars and conferences. Often this aspect of their activities forms an integral part of their cooperation with the commercial sector, public authorities and other organisations. Teachers are an important group in this respect.

Supplying information needed in the community

The higher education institutions endeavour in different ways to supply the information which is increasingly needed as a basis for different kinds of decisions in the community. Virtually all the institutions can cite concrete cases of providing information needed to make political decisions. These contacts are often at individual level and no systematic records are available. The higher education institutions point out that providing knowledge on which political decisions can be based is an important task for research. We share this opinion.

Libraries are a communication resource

The libraries of many higher education institutions offer an important resource for communication with groups outside the institution. We consider that greater use of libraries for this purpose would enhance communication between the institutions and the surrounding community.

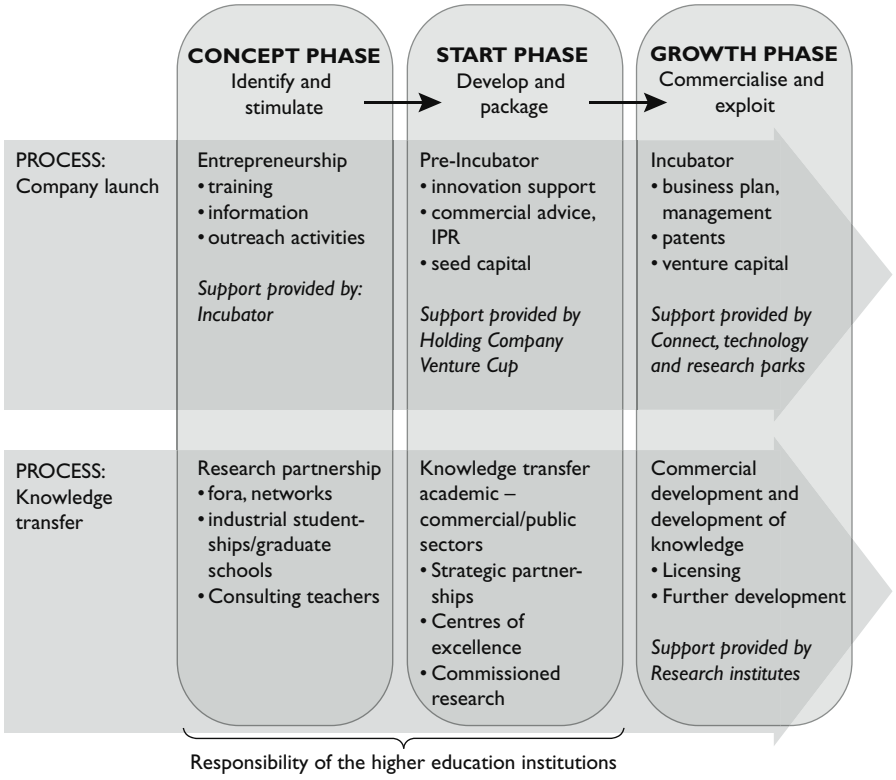
Cooperation for the development of knowledge and growth

The higher education institutions are part of a knowledge and innovation system and therefore contribute to the development of knowledge and growth. Knowledge and innovation systems can be described as intended to:

- launch companies.
- transfer knowledge between higher education institutions and the public or commercial sectors.

The diagram below illustrates what kind of contribution a higher education institution can make to Swedish knowledge and innovation system.[11]

Knowledge and innovation system



This diagram illustrates the two processes in a knowledge and innovation system: the launch of a company together with the transfer of knowledge between

11 This diagram is based largely on information in the responses to our questionnaire submitted by the Chalmers University of Technology and Linköping University.

the institution and the commercial or public sector. There are no distinct demarcation lines between these two processes.

The processes are divided into three phases: concept, launch and growth. The main activity of the higher education institutions will take place during the concept and launch phases.

During the concept phase the possibilities of entrepreneurial activity in partnership with research are broached and identified. The institution can train, inform and look for employees and students in order to provide support for the launch of the company. Here support can be provided by some form of "incubator" programme.[12] Fora and networks can be established to support the transfer of knowledge, and this can also be stimulated by creating industrial studentships, by graduate schools or by appointing consulting teachers.

The start phase involves the development and packaging of what is to be commercialised or exploited in some other way. The higher education institutions can support these operations in a pre-incubator, i.e. a development tool that enables companies to be launched and allowed to grow. It offers assistance with innovation, commercial counselling and support on intellectual property issues. A holding company can, for instance, provide initial seed capital, the funding required during the early phase of developing ideas with growth potential. The Venture Cup business plan competition may also be able to provide support.[13]

During the start phase there are various forms of strategic partnership that can enable the transfer of knowledge between higher education institutions and the public or commercial sectors, using centres of excellence, for instance, or commissioned research.

The growth phase is when the concepts and research results are commercialised and exploited. Start-up support can be provided through an incubator project. This will involve assistance with the formulation of business plans and counselling on management and patent issues. During this stage venture capital and other forms of support are needed and these, together with important contacts, can be provided through business and research parks and the Connect network. [14] Knowledge transfer can take place through commercial development and enhanced expertise in the form of licence agreements or the further development of concepts outside the higher education institutions at research institutes, for example.

12 The aim of the "Incubator" foundation is to enable students to undertake projects, launch companies and develop their ideas while they are studying. Incubators programmes can be found at about ten Swedish universities.

13 Venture Cup is a business plan competition intended to stimulate the creation of new, innovative companies with a potential for growth in Sweden and which will therefore contribute to the practical application of ideas and knowledge. Venture Cup is more than a mere competition thanks to the extensive range of activities and services it offers.

14 Connect Sweden is a project intended to link entrepreneurs with the resources required for commercialisation such as funding. It operates under the aegis of the Royal Swedish Academy of Engineering Sciences, the Swedish Industrial Development Fund and the Confederation of Swedish Enterprise.

Our task has included identification of the higher education institutions that, on the basis of their circumstances, have the most effective cooperation aimed at the development of knowledge and growth. These are Chalmers University of Technology, Linköping University and Blekinge Institute of Technology. The Karolinska Institute, Karlstad University and the University College of Mälardalen also deserve mention. In selecting the higher education institutions that have the most effective cooperation for the development of knowledge and growth we have considered whether they take responsibility for the entire knowledge and innovation system.

An account is given below of what characterises cooperation for the development of knowledge and growth and ways in which we suggest this could be improved.

Enhanced support for commercialisation

The idea of a higher education institution providing support for the commercialisation of research results and ideas is relatively new for most of them. Major developments have taken place in a substantial number of cases since the early 1990s.

This development may be due to the importance attributed to these activities by the national authorities and the various forms of support provided, such as the establishment of holding companies. The interest shown by the commercial and public sectors in the knowledge and expertise to be found in higher education has also spurred this development.

A holistic approach needs to be developed

Most higher education institutions are involved in knowledge and innovation systems. The institutions assist their staff and students to launch companies and also take initiatives to facilitate the transfer of their knowledge to the surrounding community. Most of the institutions consider that an important platform for the development of new knowledge is provided by the transfer of knowledge between the higher education institutions and the commercial or public sectors.

The emphasis is placed at most higher education institutions on supporting the launch of companies. Most initiatives are taken in the start-up phase – considerably less effort is devoted to identifying ideas and stimulating entrepreneurship. At some institutions virtually nothing is done to stimulate entrepreneurial thinking.

There is a need at most higher education institutions to develop a holistic approach to the knowledge and innovation process. One reason is that in certain cases it is unclear what roles should be played by the higher education institutions themselves and by other actors in the system. We have also gained

the impression that the higher education institutions have a somewhat weaker footing than the other actors involved.

Our impression is that the higher education institutions should devote more emphasis to support for commercial development and other forms of exploitation of research results in existing companies and in the public sector.

We consider that the higher education institutions should develop strategies to provide the support needed through the entire knowledge and innovation process. These strategies should also include developing and maintaining networks that include members able to take over in the final phases of the process. The national authorities should clarify the role of the higher education institutions in the knowledge and innovation system to facilitate the development of these strategies. Such clarification must at the same time involve providing the higher education institutions with the resources required to live up to the role assigned to them.

Given the measures referred to above, the higher education institutions can play a more powerful role in the knowledge and innovation systems. This would give them more scope than they currently possess to choose in which contexts to commercialise ideas or research results so that they would not have to accept to the same extent priorities set by others.

Incentives lacking for both institutions and staff

Most of the higher education institutions ascribe importance to participation in the knowledge and innovation system. The incentives for them to do so today are too weak.

An enquiry is currently under way into the future of teachers' intellectual property rights and its report will be submitted in the spring of 2005. Irrespective of the findings of this enquiry, we are anxious to ensure that there are incentives for the institutions to play an active role in the knowledge and innovation system. This could stimulate participation by institutions that are currently not particularly active. Our impression is that incentives that stimulate the involvement of teachers and researchers in the knowledge and innovation system also result in more active participation by the higher education institutions as well.

Training in entrepreneurship – a minority interest

Several higher education institutions offer training in entrepreneurship, sometimes with a practical bent. This is intended to stimulate entrepreneurial thinking. The groups of students most often offered this possibility are those taking programmes in economics or engineering. Sometimes institutions cooperate in providing this kind of training.

The training is offered in the form of individual courses or as modules in degree programmes. On the whole training is rarely offered in the form of a

theme or a coherent series of courses throughout an entire programme. This can be interpreted to suggest that little significance is attached to entrepreneurship as an approach in these programmes but that it is something that goes on alongside normal day-to-day activities.

Our opinion is that training in entrepreneurship should be offered as a "theme" throughout an entire degree programme and to more groups of students than is currently the case. We would also like to encourage further cooperation between the higher education institutions in arranging these courses.

Better interaction needed with holding companies

There are now 14 higher education institutions with holding companies and these have been given varying tasks. At some institutions they are used to provide early seed funding, i.e. funds to enable the early phase of the development of ideas with growth potential and support for innovation, while at others they are responsible for extensive operations through subsidiaries, for instance companies to provide support for commissioned courses. [15] There are variations in how well holding companies and the institutions cooperate to support the launch of new companies.

We consider that effective cooperation between the institutions and their holding companies is important and that there should be incentives for this kind of cooperation. One method would be to give the institutions the right to dispose of any profits made by the holding companies. These additional resources could then be used to cofinance activities to support innovation at the institution, such as training in entrepreneurship with scope for the development of commercial ideas.

Students lack access to the boards of the holding companies

We have noted that the provision in the Higher Education Ordinance[16], entitling students to representation on all decision-making or preparatory bodies does not apply to the boards of the holding companies. We consider it important to provide students with insight into the operations of the holding companies, for instance by co-opting student representatives to their boards.

15 What characterises commissioned courses is that fees are charged for these programmes, unlike higher education in Sweden in general. The participants are nominated by the companies or agencies that provide the funding. Private individuals are not allowed to procure commissioned courses.

16 Higher Education Ordinance 3.9

The need to collaborate

The higher education institutions avail themselves of each other's expertise in areas that involve commercialisation to a relatively small extent. Several of the institutions have specialist skills in one or several areas, such as intellectual property rights in specific sectors.

We consider collaboration between the higher education institutions on these issues is important. This would provide researchers and teachers with even better support than they have today for commercialisation.

The importance of well-developed strategies for knowledge transfer

Commissioned research is relatively restricted and is not considered by the higher education institutions to play an important role in the transfer of knowledge to the surrounding community. One explanation could be the lack of capacity for this kind of activity because, for instance, research is often commissioned at short notice. Instead strategic partnerships and cooperation in centres of excellence provide the most important methods for transferring knowledge. Industrial studentships and certain kinds of graduate schools also provide a platform for strategic collaboration. Cooperation of this kind can enable more focused partnerships to emerge when areas and activities of mutual interest have been identified.

We consider that the higher education institutions should develop additional networks and interfaces with other actors, for instance through research institutes. One way to enable the transfer of knowledge between the higher education institutions and their surrounding communities to function more effectively would be to allow the research institutes to play a more important role. They have networks with companies and the public sector and can undertake shorter assignments with greater flexibility. As an alternative or complement the higher education institutions could establish organisations resembling the institutes. This would enable the higher education institutions themselves to undertake commissions at short notice.

Cooperation to improve programmes

Educational programmes should also include cooperation with the surrounding community as their content is required to correspond to the demands of the labour market and students are supposed to have contact with the community during their studies. The government exercises some degree of control over these issues, for instance in determining enrolment numbers and the numbers of degrees to be awarded and also by requiring placements and training in certain skills.[17] Objectives in terms of the numbers of degrees to be awarded apply to the caring sciences and teacher training programmes. Placements are required in teacher training programmes and, in practice, in programmes training social workers as well. Training in certain skills is a requirement in programmes in the caring sciences. To meet short-term demands for knowledge and qualifications the government also requires the higher education institutions to offer commissioned courses.[18]

In addition to the requirements listed above, the higher education institutions may themselves determine how much emphasis to afford to the demands of the labour market and to the community contacts required by students during their courses.

One of the things we have been asked to do is to identify the higher education institutions that, on the basis of their circumstances, cooperate most effectively to improve programmes. These are Linköping University and the University College of Mälardalen. Mention should also be made of Karlstad University and Uppsala University. Our assessment is based on:

- The extent to which the institution has a strategy for planning, reviewing and revising programmes in the light of demands in the labour market and in what other ways it adapts the range of programmes offered to match labour market requirements, and also
- To what extent the institution works systematically to enable students during their studies to meet various actors in the surrounding community by involving teachers with experience from outside the institution in the programmes and whether the institution also provides activities intended to facilitate student contacts with the labour market and the community at large.

17 Since 2004 the National Agency for Higher Education has been working on the task of providing the government and the higher education institutions with data that will enable better planning of the range of programmes offered to match the demands of the labour market.

18 What characterises commissioned courses is that fees are charged for these programmes, unlike higher education in Sweden in general. The participants are nominated by the companies or agencies that provide the funding. Private individuals are not allowed to procure commissioned courses.

An account is presented below of what characterises cooperation to improve programmes and our proposed improvements.

Lack of strategies for designing future programmes

The higher education institutions attempt in various ways to obtain the views of the surrounding community so that they can plan, review and revise programmes to correspond to the demands made in the labour market. Few institutions, on the other hand, have any strategy to enable collective treatment of this information, for instance how various views may complement each other and how they can be used as planning tools. In addition strategies are lacking that would make it possible to equate these views with advances in research so that programmes to be planned in the light of future needs. Little reference is made to ways in which views expressed in the community influence the organisation of graduate programmes. Another perspective that is lacking is how programmes can be adapted for students who intend to become self-employed by starting their own companies.

We consider it remarkable that few institutions inquire into the views of their previous students, alumni, on whether their programmes provided the knowledge and skills sought by their employers. Nor are there many surveys to determine whether individuals are working in the areas for which they were trained.

We are aware that it is difficult to know which programmes there will be a demand for in the future. There are examples of forecasts being wrong. Nevertheless we consider that the information used to decide on programmes to be offered and their contents should be as complete as possible. This involves ascertaining the wishes of employers.

Our impression is that the higher education institutions should develop strategies to enable them to take advantage of the views of the surrounding community in a systematic way. This applies to both undergraduate and graduate programmes. In addition it is important to take into account current research when designing programmes to meet future needs.

Administrative support important for increasing commissioned courses

Commissioned courses provide one way of meeting employers' more immediate needs of knowledge and skills. Commissioned courses account on average for only a few per cent of undergraduate programmes as a whole. Some higher education institutions offer virtually no commissioned courses, for instance many of the artistic colleges.

One general reason for the restricted extent of commissioned courses may be inadequate teaching capacity. In practice it is often impossible to recruit more teachers for this task alone. Courses are often commissioned at short notice

so that the higher education institutions, with their relatively long lead times, find it difficult to undertake them. Commissioned courses also involve some degree of financial risk. Even if an institution devotes considerable resources to planning such courses, it cannot be sure of recruiting enough participants to cover its costs.

One reason why there are virtually no commissioned courses in the fine arts could be that resources in the cultural sector are too scant to fund them. The sector comprises many freelancers who may operate as self-employed contractors. Their companies therefore lack the legal status required to allow them to commission courses from the higher education institutions.

We consider it important for the administrations of the higher education institutions to offer various form of support to provide scope to raise the volume of commissioned courses. This could involve, for instance, devising a model to spread the risk across the institution – what is important is that commissioned courses can be planned and arranged within the institution without incurring too great a financial risk. It is of course important to ensure that this kind of development does not take place at the expense of the regular programmes.

We are of the opinion that the national authorities should adopt special measures to increase commissioned courses at the artistic colleges in order to stimulate lifelong learning in the artistic professions.

All students should be offered contacts with the community

Good scope is offered to students for contact with the community at the higher education institutions where priority is given to this kind of activity. Some institutions, for example, use placements and sponsor companies for this purpose. At others there are virtually no activities of this kind at all. At some higher education institutions students are provided with information about the way in which cooperation with the surrounding community is organised.

We consider it important for all students to be offered both scope for contact with the community during their studies as well as information about how their institutions cooperate with the surrounding community in other respects.

Great community commitment

Contacts with the surrounding community during studies presuppose commitment from the community, in the form, for instance, of placement opportunities, participation as guest lecturers etc. We feel that on the whole there is a great deal of commitment, even though economic fluctuations influence the willingness of the public and commercial sectors to devote resources to these activities. One reason for this commitment may be the feeling that sponsor-

ship offers benefits to companies by enabling knowledge transfer and offering future recruitment possibilities.

Community contacts rarely involve placements

Although most higher education institutions employ guest and consulting teachers, not many offer the possibility of placements. At only a few is there any scope for placements in the programmes in the social sciences and humanities.

In some programmes placements are a degree requirement, in others not. Our survey did not make it possible to discern the criteria used by the higher education institutions in assessing whether to require placements for the award of a degree or not. It may also be the case that there is no consistent way of making this assessment, not even within one and the same institution.

It is our belief that the higher education institutions should endeavour to include placements in more programmes than is currently the case. We consider that the acquisition of some form of skill can play an important role in equipping students more suitably for the labour market and enabling them to reflect on their theoretical learning.

We are aware that not all students are interested in placements and that it is not certain that all programmes will be improved by the inclusion of placement periods. It may also be difficult to arrange the requisite numbers of appropriate placements. It is therefore important to make haste slowly and to evaluate new initiatives.

We consider it important to initiate discussion about and the formulation of criteria to enable placement to be required for all degrees.

Institutions should support their students' entry into the labour market

The higher education institutions also endeavour to support the entry of their students into the labour market. The extent to which this support is provided varies – ranging from occasional labour market days to labour market centres that offer companies assistance in recruiting students from the institution.

In our opinion it is important for the higher education institutions to support the entry of their students into the labour market. In doing so the institutions should not undertake what can best be done by other actors, such as the employment exchanges. It must also be borne in mind that the resources devoted to this support would otherwise have been allocated to undergraduate programmes to finance teaching resources.

When, for instance, labour market centres assist companies with their recruitment, it is important for the higher education institutions not to be able to exert influence on any individual appointment. The institutions have already made an assessment of their students through their examinations. We

do not consider that the role of the higher education institutions includes assessing what chance of success a student has in the labour market.

We believe that there should be more discussion than today about the roles that higher education institutions should play in supporting the entry of their students into the labour market.

Implementation and follow-up

It is to some extent the responsibility of the higher education institutions to create the conditions to enable cooperation with the surrounding community. This may involve organisational changes, issuing instructions and also providing incentives. Systematic follow-up will make it possible to gain some impression of whether the objectives and measures adopted have had any impact. An account is given below of the internal activities of the institutions, mainly at administrative level, to provide scope for cooperation with the surrounding community within their own organisations and proposed improvements.

A decentralised process

Cooperation with the surrounding community is largely decentralised as much of it occurs in the course of the daily work of the researchers and teachers at the higher education institutions. The institutions' administrators have issued instructions and made organisational changes to provide support for this process.

Most higher education institutions have central units that provides support for cooperation with the surrounding community. Most frequently their role is one of coordination. Several higher education institutions have reorganised divisions that were once responsible for commercial contacts and extended the sphere in which they operate.

We have tried to gain some impression of what kind of organisation is best suited to the needs that arise in various situation, but have been unable to draw any unambiguous conclusions. We consider that a more detailed study is required. A study of this kind could provide support for higher education institutions in the context of reorganisation.

Lack of incentives

At the majority of higher education institutions no priority has been given to the development of incentives to encourage researchers and teachers to cooperate with the surrounding community to a greater extent. Although no detailed survey has been made, our overall impression is that cooperation is not normally considered as a qualification in academic careers. We have only been given a few examples of individuals for whom experience of cooperation played some role in their appointment or promotion. There are, however, exceptions and several institutions include cooperation activities in qualification portfolios.

There may be several reasons for not considering cooperation with the surrounding community an important qualification. It may be the result of for-

mal requirements – the weight given to this form of cooperation will depend on the nature of the post. We do not feel that this is a satisfactory explanation. Yet another explanation may be that neither administrators nor teaching staff ascribe adequate legitimacy to cooperation with the surrounding community. It may also be the case that the national authorities have not been explicit enough in stating that cooperation with the surrounding community is an important task for the higher education institutions.

The situation can be compared to some extent with the introduction of the evaluation of teaching qualifications in appointment procedures at the beginning of the 1990s. This process encountered problems as well.

We believe that it is important in practical application of the Higher Education Ordinance to ensure that cooperation with the surrounding community is regarded as an important qualification for an academic career. This will provide more incentives and offer a basis for continued development. Here we feel the higher education institutions could learn from each other. Support could be provided, for instance, by institutions that include this form of cooperation in their qualification portfolios.

Defective monitoring

We have not been able to identify any higher education institution that monitors cooperation with the surrounding community systematically. Some have, however, begun to develop procedures that will enable better monitoring.

The failure of the higher education institutions to monitor this cooperation may be due to lack of certainty about what to focus on. Several institutions consider that one obstacle is posed by the vagueness with which the national authorities define the concept of cooperation.

Our impression is that monitoring must be improved. It is important, for instance, in enabling the administrators of the higher education institutions to assess how successful endeavours are in relationship to their goals and how cooperation processes develop over time. Here too the institutions should learn from each other. Support can be provided by the institutions that have begun to develop their procedures.

Concluding reflections and overall recommendations

We have been able to determine that **cooperation with the surrounding community is an approach that is soundly integrated into research and teaching**. It is important for the higher education institutions to be open to the community and to cooperate with local authorities, public agencies, companies, schools, the general public, trade unions, politicians, international organisations etc. The provisions in the Higher Education Act that stipulate cooperation between the higher education institutions and the surrounding community say very little about what this cooperation is to consist of and why it is important. Scrutiny of the pronouncements of the government in bills submitted to the Riksdag in recent years enables three goals to be identified for this cooperation.

Cooperation to enhance democracy is one of these goals. The efforts devoted by the higher education institutions to research communication and popular education provide people with the knowledge that enables them to influence the directions taken by research. We consider that it is legitimate to demand that citizens should be given information about the way in which state funding for research is used.

Cooperation for the development of knowledge and growth is another goal. The higher education institutions develop new knowledge together with the commercial and public sectors. We consider that higher education plays an important role in the innovation system – ideas and research results from our higher education institutions lead to new entrepreneurial undertakings and the commercial development of existing companies.

Cooperation to improve programmes is yet another goal. Programmes are improved in that the higher education institutions take into account what is being asked for on the labour market. We also consider that it is important for students to have contact with the community during their studies.

These different elements complement each other. We have seen how cooperation in programmes provides scope for research partnerships and vice versa. When new knowledge acquires legitimacy with the general public, the workings of the knowledge and innovation system are also affected.

The administrators of the higher education institutions believe that cooperation with the surrounding community provides support for their operations and forms an integral element of their research and teaching, and this also finds expression in the way in which it is organised. In order to cooperate more effectively with the surrounding community the higher education institutions are collaborating with each other in strategic alliances. Our impression is that collaboration and the division of labour between the institutions will be an

important issue in the future and that **closer study is required of the factors leading to the success of strategic alliances.**

The higher education institutions cooperate with their surrounding communities in many different ways and with many stakeholders. Considerable development has taken place in the last ten years.

We believe that we have been able to discern some decline in recent years in the priority given to cooperation to enhance democracy by both the national authorities and the higher education institutions. One indication is that the vast majority of institutions do not view the general public as a priority target group. Several institutions are hesitant about whether cooperation with the surrounding community includes research communication/popular education. Rarely is there internal organisational support for research communication/popular education. We have also noted that on the whole there is a lack of external actors who can provide backing.

We consider that **greater weight should be given to cooperation intended to enhance democracy** than is currently the case.

We are on the whole impressed by the what the higher education institutions are doing. Further development would be possible if incentives were improved. It is particularly important to ensure that weight is in fact given to cooperation with the surrounding community when evaluating the qualifications for academic appointments and promotions.

The scope open to the higher education institutions to cooperate with their surrounding communities varies and **it is important for them to base their work on the conditions that prevail**. This will result in diversity and different profiles.

Different approaches to cooperation and development strategies between external funding agencies and individual higher education institutions detract to some extent from their effectiveness and obstruct development. Since the end of the 1990s and up until today public funding has been available from a number of different sources, such as public agencies, to finance fully or in part various cooperation projects and activities. These undertakings have been interesting ones, but on the whole they have sprung from the strategies and approaches to cooperation espoused by the agencies providing the funds. To enable the development of the structures needed to support this cooperation organisations had to be found that were prepared to provide the resources required by the higher education institutions. The problem with external funding in this case is that the analyses of the higher education institutions and their own goals have not had sufficient impact on the projects and activities organised.

We consider that the higher education institutions are now ready to take greater responsibility for the development of cooperation procedures. Therefore **some of the resources for cooperation currently allocated via agencies accountable to both the Ministry of Industry, Employment and Communications and the Ministry of Education and Science should instead be allot-**

ted to the higher education institutions in the form of direct state funding. The aim is to provide further support for developments in accordance with the strategies and objectives adopted by the institutions.

In addition, the national authorities should allocate resources in ways that will increase the incentives for cooperation. **Funds could, for instance, be allocated on the basis of how successful the cooperation of a higher education institution is in relation to its own objectives.**

In our opinion both of these **proposals require closer monitoring.** Some higher education institutions have already begun to develop models for monitoring. An exchange of experiences between the institutions in this field could be helpful for this process.

Appendix: Questionnaire for evaluation of cooperation with the surrounding community

HÖGSKOLEVERKET
National Agency for Higher Education
Reg.nr 643-4871-03

The composition of the panel of assessors, their task and point of departure

The evaluation of cooperation with the surrounding community is a project undertaken by the National Agency for Higher Education. A panel of assessors has been appointed to assist with this project. This consists of Mårten Carlsson, Prof. em., Vice-Chancellor of the Swedish University of Agricultural Sciences 1982–94, Peter Johansson, responsible for R & D issues at the Confederation of Swedish Enterprise, Katrin Sjunnesson, Swedish National Union of Students, Christina Skantze, Head of the Structural Fund Unit at NUTEK, the Swedish Business Development Agency, and Lena Wollin, Information Officer at the Swedish Research Council, together with Maria Lönn, project administrator. The panel will be referred to below as "we".

We have been asked to describe and evaluate how the higher education institutions deal with the task of cooperating with the surrounding community. This is intended to contribute to development of this cooperation at the higher education institutions in Sweden.

We have identified a number of important circumstances that affect how successfully the higher education institutions can organise their cooperation with the surrounding community. Questions intended to shed light on these are posed in section A.

Our evaluation will focus on the statements made by the government in proposing legislation requiring cooperation with the surrounding community. The relevant questions are posed in section B. When questions refer to an institution's educational programmes both undergraduate and graduate course are included.

In order to disseminate knowledge about successful initiatives, examples of good practice in routine procedures or projects are requested in section C.

Section D concludes the questionnaire by asked the higher education institutions to make a critical appraisal of the current terms that affect cooperation with the surrounding community and the regulations issued by the national

authorities. This section also offers the institutions an opportunity to make any other comments it feels necessary in connection with the evaluation.

The view taken by the panel of the task of cooperating with the surrounding community

We consider that the task of cooperating with the surrounding community is very important for both the higher education institutions and the community at large. This cooperation is, in this respect, a shared responsibility. This is also emphasised by the government. The government also states that cooperation is an approach to be adopted in everything the higher education institutions undertake. It is our belief that if this view is to have an impact on the entire institution, the vice-chancellor must work actively in the field of cooperation and demonstrate clearly the importance the institution attaches to it.

There are many aspects to the task of cooperation and we would like to mention some that are particularly important:

- The democratic aspect, that research processes and their outcomes are to be made available to the general public to enable dialogue and well-founded political decisions.
- The growth aspect, that the surrounding community – the commercial sector in particular – is provided with research findings and solutions to current problems.
- The recruitment aspect, that the surrounding community is provided with a trained labour force and the range of programmes offered corresponds to labour market requirements.
- The research aspect, that the higher education institutions acquire greater awareness of the problem areas in the community to provide **one** of the grounds on which to base the selection of research topics.

General questions

Cooperation with the community in the past and today

Experience of cooperating with the surrounding community among Sweden's higher education institutions varies in extent. The cooperation demanded of the higher education institutions by external actors has increased in recent years, as a result, for instance, of the growing importance of knowledge-intensive companies, organisations etc. and the qualifications they demand. Attention had already been drawn to this state of affairs in 1997 in the wording of the Higher Education Act (SFS 1996:1392): "The institutions of higher education shall also cooperate with the surrounding community and give information about their activities."

The scope open to the higher education institutions for cooperation with the surrounding community varies. This is not solely the result of the institution's internal circumstances, for instance the number of employees or students, the funding available or the disciplines in which research and teaching

are undertaken. It is also influenced by the stakeholders that cooperate with the higher education institution and what form this cooperation takes. The stakeholders referred to are, for instance, research institutes, research councils, the commercial sector, local and regional public authorities and the general public.

1. Give a brief description of developments in the institution's cooperation with the surrounding community during the last ten years resulting from changes in the importance of stakeholders and their needs, amendments in the formal requirements made by the national authorities, different forms of funding, etc.
2. Give a brief description of the most important stakeholders currently involved in the institution's cooperation with the community.
3. Give a brief description of the vice-chancellor's view of cooperation with the surrounding community and the priority attached to it in relation to other tasks.
4. Give a brief description of how cooperation is organised in the institution.

Questions that deal with various aspects of cooperation

Regulations and monitoring

5. What general regulations have been issued concerning cooperation with the surrounding community? Please attach them.
6. How does the administration[19] ensure widespread endorsement of these regulations within the institution?
7. How is cooperation with the surrounding community monitored?

Research communication – the democratic aspect

8. What measures are adopted to popularise the research process and its results for

a) The general public?
b) Children and young people?
c) Specific vocational groups?

9. Has the institution been asked to produce knowledge on which political decisions may be based?[20] If so, please provide examples.

Growth and recruitment aspects

10. How is commercialisation of research results organised and managed? Your response should also provide examples of the outcomes, e.g. commercial developments or new companies.

19 "Administration" is used here to refer to the executive officers, e.g. the vice-chancellor, pro-vice-chancellors or vice-vice-chancellors.

20 Prominence has been given to this question by the EU's work on "science and governance". See for instance the European Commission's action plan Science and the Community from 2002.

11. In what way does the institution make it easier for students and researchers to cooperate with companies, entrepreneurs and investors?
12. What is done to ensure that the range of programmes offered corresponds to future labour market requirements?

Cooperation in educational programmes

13. To what extent do individuals with experience from outside the higher education institution participate in teaching?
14. How are students informed during their programmes about the way in which the institution cooperates with surrounding community?
15. What other forms of contact do students have with cooperation with the surrounding community during their studies?

Research aspect

16. What procedures are in place at the institution to ensure the early involvement of future beneficiaries of research results in the research process? Please include examples in your response.

External stakeholders

17. What steps are taken by the institution's administration to support the establishment of networks with the surrounding community?
18. Have different stakeholders provided financial backing or otherwise supported the development of cooperation?

Commissioned courses

19. How are commissioned courses initiated and planned? Are there any special instructions relating to commissioned courses? Please attach them.
20. Have any specific individuals been appointed to manage commissioned courses or is there any special organisation with this responsibility? If so, what are their most important tasks in this respect?

Full recovery of cost[5]

21. How does the administration ensure that all costs are recovered in connection with commissioned courses and commissioned research?

Collaboration with other course providers

22. What collaboration is there with course providers outside the higher education sector?

Qualifications

23. What attention is paid to experience of cooperation with the community when making staff appointments? Please do not hesitate to attach a copy of the institution's appointment procedure.

The role of the library

24. What use is made of the library in cooperation with the surrounding community?

C. Examples of good practice

In connection with our report we intend to publish examples of successful initiatives (which may comprise both routine procedures and projects) in the area of cooperation with the surrounding community. Please describe some examples of good practice at your institution.

We would like descriptions of good practice to focus on the stakeholder or stakeholders that the higher education institutions cooperate with. These examples should also present the benefits experienced by the stakeholders concerned and by the institution itself. If possible we would like these descriptions to be drawn up together with the stakeholders involved.

Each example should be described in no more than two A4 pages. No more than five examples of good practice should be submitted by any one institution. We reserve the right to edit any text we choose for publication.

So that we can request supplementary information and discuss any potential publication we would like the name and e-mail address of contact individual(s) for the institution's "examples of good practice". We would also be grateful for the names and e-mail address of any individuals who could represent the stakeholders in the specific examples.

D. Critical appraisal

Make a brief critical appraisal of the current terms that apply to cooperation with the surrounding community and the directives issued by the national authorities. You may also submit any other points of view you consider relevant to this evaluation in your appraisal.

The National Agency for Higher Education (Högskoleverket) is a central authority that deals with issues concerning Swedish universities and other institutions of higher education. The Agency's tasks involve quality reviews, the supervision, monitoring and development of higher education, producing reports and analyses, evaluation of foreign qualifications and the provision of information for students.

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