



Report 2006:33 R

How Did Things Turn Out?

Quality evaluations 2005



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**How Did Things Turn Out?
Quality evaluations 2005**

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Foreword

The final round of evaluations of subjects and programmes in the current six-year cycle is now taking place. The evaluations for 2005 have been published, the evaluations for 2006 are currently in progress and at the same time the work of developing the new system of evaluation to start in 2007 is under way.

When the 2005 evaluations came to an end, about 1,200 appraisals of undergraduate and postgraduate programmes had been made. Around 600 assessors from Sweden and abroad have so far been involved in the Swedish National Agency for Higher Education's panels. The findings of this year's evaluations show that higher education in Sweden still maintains satisfactory or good standards. Of the 214 appraisals carried out in 2005, only in 17 cases has the evaluation led to questions about entitlement to award degrees. We can also see that the evaluations have had a real effect. This is indicated not least by the report on the first follow-up of just over 200 evaluations three years after their completion published this year.

The evaluation of subjects and programmes is an extensive undertaking that is possible thanks to the staff, students and postgraduate students at the higher education institutions, the assessors and the staff of the Agency.

Sweden, together with other European countries, is involved in the Bologna Process, in which some of the emphasis is placed on the importance of enhancing internationalisation and the significance of encouraging mobility, employability and competitiveness. It is therefore regrettable that this year's evaluations confirm what seems to be a negative trend, which is that Swedish students are increasingly failing to pursue some of their studies in other countries. This may serve as an important reminder of the importance of international cooperation.

This report is included in the annual account the Agency is required to submit to the government according to its directives and has been discussed by the board of the Agency.



Sigbrit Franke
University Chancellor

Summary

In this report on the fifth year of evaluation of subjects and programmes, the Swedish National Agency for Higher Education is able to determine that higher education in Sweden maintains satisfactory or good standards. During the five years just over 1,200 programmes have been evaluated. Slightly fewer than 100, or 8 per cent, have displayed such shortcomings that the Agency has questioned entitlement to award degrees. Hitherto the Agency has not been obliged to take the next step of withdrawing this entitlement but in every case the higher education institutions have adopted measures to avoid this or alternatively withdrawn the programmes. About 600 assessors have taken part in the evaluations. The foreign assessors involved have come from about 50 higher education institutions, most of them in the Nordic countries.

An important element in the Agency's evaluation model comprises follow-up of previous evaluations. During the past year follow-up took place, three years after publication of the evaluation reports, of both how higher education institutions had reacted to the recommendations they contained and also what results and effects the evaluations had led to in other respects. This follow-up revealed that the evaluations have had manifest impact. The institutions emphasise the significance of the self-evaluation process and state that the evaluations provide a basis for internal reflection, development and decisions. The national impressions of a subject or a qualification provided in the reports are appreciated, as is the scope provided for comparisons.

The evaluations undertaken in 2005 confirm many of the observations that have been made since the evaluation of subjects and programmes began in 2001. One of these concerns the working conditions of the teachers. More and more time is devoted to teaching increasing numbers of students in groups that have become larger and larger. Many teachers also have to spend more time on applying for external funding for research. This affects both their academic freedom and their chances of including elements in their teaching that can extend the educational breadth of their students. Another observation concerns internationalisation. This year's evaluations also indicate that the participation of Swedish students in exchange programmes is low and in some cases seems to be declining, a trend that hardly fits in with increased internationalisation of education that is one of the objectives of the Bologna Process. As in previous years, the assessors emphasise the need for follow-up studies of alumni.

With the completion of the 2005 evaluations, all the language programmes and all the technological programmes have been evaluated. This year's findings confirm the impression already formed of the difficult situation in which "small languages" find themselves. Generally speaking, the technological programmes are of good quality but can, nevertheless, be seen to share a number of problems and challenges. These include the inadequate prior knowledge of

newly enrolled students, recruitment problems, a bewildering range of programmes, the lack of elements to enhance intellectual “breadth”, inadequate contact with industry and little internationalisation.

Cooperation is an issue that has been raised in all the evaluations. Follow-up studies of the impact of the evaluations reveal that cooperation takes place but that the lack of financial resources poses obstacles. In this year’s evaluations attention has been drawn to subjects involved in cooperation with teacher-training programmes. Here it can be seen that this can give rise to undesirable effects. There is, for instance, the risk that cooperation with teacher-training programmes may have a negative impact on the contents of literature programmes. The same applies to the subject of biology.

Evaluations of subjects and programmes in 2005

During 2005, 134 undergraduate programmes and 80 postgraduate programmes in a total of 12 different subject and programme areas have been evaluated. These evaluations have covered widely differing areas and also varied a great deal in extent. Among the more comprehensive were the evaluations of master's programmes in engineering as well as those involving biology, political science and literature.

The evaluation of master's programmes in engineering and the evaluation of postgraduate programmes in the technological sciences, also undertaken during 2005, means that the entire field of technology has been evaluated and can now be summarised.

With the evaluations of the Finno-Ugric languages and the East-Asian languages all the programmes in modern languages have also been evaluated. The findings largely confirm the impression of the situation for "small languages" that has been described in previous reports.

Other evaluations carried out during the year concerned work science and statistics. The evaluation of work science showed the dilemma that many interdisciplinary or multidisciplinary subjects have to contend with. Statistics faces other problems that relate more to the role it plays as an ancillary subject for other subjects.

Human geography, which is one specialisation in the discipline of geography, and special education, an advanced course for those with teaching qualifications, are two other programmes that were appraised during 2005, as was the programme in physical planning offered at only one higher education institution.

Table 1 presents a survey of the subjects and programmes that have been included in the evaluations undertaken during 2005.

Table 1: Evaluations and numbers of programmes appraised

Evaluation	Numbers of programmes appraised		
	Undergraduate	Postgraduate	Total
Work science	7	7	14
Biology	22	11	33
Engineering, master's programmes	11		11
Finno-Ugric languages	8	5	13
Physical planning	1	1	2
Cultural geography and geography	14	7	21
Literature studies and rhetoric	22	9	31
Special education qualification	6		6
Statistics and demographics	10	8	18
Political science, peace and development studies, area studies	26	15	41
Postgraduate programmes in technological sciences		12*	12
East Asian languages	7	5	12
Total	134	80	214

* This evaluation was conducted at faculty level at twelve higher education institutions.

What do the evaluation reports reveal?

Work science – a subject with many components and indistinct identity

Work science is a multifaceted subject with roots in many different disciplines. For practical reasons the higher education institutions have often opted to specialise in one of the many potential specialisations. The content of the programmes can therefore vary widely from institution to institution. This gives rise to difficulties in specifying the kernel that provides the subject with its identity, which can result in it being marginalised or regarded as an ancillary subject within the institution. The adoption of a highly specific profile may also make it more difficult for students to move from one institution to another.

In several of the programmes in work science that were evaluated the range of courses offered can be compared to a smorgasbord of courses for 5 or 10 credit points, each reflecting different aspects or areas of study within the subject. More rarely are courses offered that provide a coherent introduction to work science as a discipline. The desire to cover as wide an area as possible in theoretical courses often leads to shortcomings in their coverage of methodology and disciplinary theory. The Agency agrees with the recommendation of the panel of assessors that the departments of work science should cooperate on the production of a platform on which to base the content and methodology of programmes so that a shared subject identity can be developed. This would enhance both student mobility and the academic credibility of work science as a subject.

The research that is carried out in work science is characterised by its numerous contacts with industry and the community, which increases the scope

for commissioned courses and external funding for research projects. This is naturally positive in many ways, but the evaluation reveals that the external funding has in a number of courses evolved into permanent financial dependence for survival. This makes the subject vulnerable to economic vicissitudes and can in the long run jeopardise its integrity and the profiles adopted. A high degree of financial dependence on one source of funding could threaten the legal rights of postgraduate students. They may find themselves in the predicament of feeling that they are primarily employed on fixed-term contracts which oblige them to provide results for the external funding source and only secondly postgraduate students.

The Swedish National Agency for Higher Education is questioning entitlement to award master's and bachelor's degrees with conflict resolution as a major subject at Göteborg University. The Agency considers that the programme with its current contents and organisation does not reach an acceptable academic standard.

Biology – good quality despite weak interest in the programmes

In terms of volume biology is a large subject. It is offered at 22 higher education institutions, of which 11 also provide postgraduate study. As a rule the standards of these programmes are good, and postgraduate programmes in many cases are of very high standard.

One of the general problems for biology as a subject is that there are relatively few applicants for the large number of places offered. This means that places remain empty and that finances suffer when the student population cannot sustain the costs required. This also has an impact on the quality of the programmes when students with unsuitable qualifications and little motivation to study are admitted. However, all of the higher education institutions are taking active recruitment measures to raise interest in programmes in biology.

A number of higher education institutions are now also admitting students who have studied humanities or social sciences in upper-secondary school. In some cases special preparatory courses are provided before they start studying biology itself, but this is not always the case. The panel of assessors considers that there is a risk that the demands made during the programmes will be lowered if teaching has to be adapted to students with inadequate prior study of natural science subjects.

At a number of higher education institutions biology students take the same courses as students on teacher-training programmes specialising in biology. This causes no problems in some places, but there are also examples of biology programmes in which the needs and aims of teacher trainees predominate. There are programmes in which more advanced study of the subject, its academic basis and critical and creative thinking have to give way completely to teaching methodology and biology teaching approaches.

Like many other, biology is a subject that has been obliged to cut down the amount of teaching offered. In particular, this has affected laboratory work and excursions, which is unfortunate as these are central components of the subject and also required for future career possibilities.

Gender equality, cooperation, the adoption of profiles and vocational links are examples of areas that need improvement in biology programmes. The labour market is also difficult for those graduating in biology, irrespective of whether they start to seek employment with undergraduate or postgraduate qualifications.

The Swedish National Agency for Higher Education is questioning entitlement to award bachelor's degrees in biology at Dalarna University College and Jönköping University College. The grounds for doing so are that these programmes fail to attain the academic level required for the award of a bachelor's degree.

Master's programmes in engineering in Sweden are of a high standard

The evaluation of master's programmes in engineering shows that in Sweden the quality of these programmes is generally high. The premises and equipment provided at many higher education institutions are very good. Healthy research environments offer great scope for the establishment of links between teaching and research, and in most cases the teaching staff are highly qualified academically. These programmes are of strategic significance for Swedish industry and many higher education institutions have close contacts with potential employers. The graduates produced are both knowledgeable and competitive. Swedish master's programmes in engineering also come out well in international comparisons.

Even though the impression provided by the evaluation of master's programmes in engineering is on the whole positive, there are also shortcomings. One problem is that the number of places offered in these programmes has increased greatly in recent years. At the same time there has been a decline in the number of applicants to the programmes, despite intensive recruitment measures.

Several environments are small and vulnerable. A few of the programmes evaluated had only enrolled 5-10 students in the autumn of 2004, which makes it difficult to offer programmes of the intended standard. The Swedish National Agency for Higher Education would welcome mechanisms to enable more realistic adaptation of the number of places offered.

Throughput is very poor. These programmes last for four and a half years, but after seven years only 55 per cent of those enrolled have been awarded degrees. The Agency can see that the higher education institutions do not have appropriate systems for monitoring and raising student success rates.

Attention is drawn in the evaluation to teacher work-loads. It is the great commitment of the teachers that has made it possible to maintain high stand-

ards in the programmes, but this has been at the expense of their own research and the development of their own expertise. The panel of assessors has formed the clear impression that the system is under great strain and that the quality of master's programmes in engineering will be threatened if no remedial measures are adopted.

The proposed improvements presented involve for instance prolongation of the programmes to five years, enhancement of elements related to sustainable applications of technology, personal and professional skills, entrepreneurship and placement periods. A shift in this direction would strengthen the environments that are not too small, enhance the links between research and teaching and probably reduce the excessive number of programmes offered today.

Finno-Ugric languages

– small vulnerable environments with economic problems

A clear concentration of the programmes offered in this subject area has taken place. The programmes in each language – Finnish, Sami, Estonian and Hungarian – are now only offered at one or a few higher education institutions. One effect of the limited student populations, with the current resource allocation system, is that many programmes face major economic problems. This leads to less scope for the employment and retention of teachers, which makes these educational settings vulnerable. The few programmes that survive are in many cases sustained by only one teacher.

In undergraduate programmes the student groups are not only small but also very heterogeneous, as they are aimed at beginner students as well as those for whom these are native languages. Many students take languages as secondary subjects, often as evening courses. There is therefore a risk they will become isolated from other language students and not become members of the critical and creative communities that are so important for all higher education.

One of the positive observations was that on the whole there are close links between research and teaching in the programmes that were evaluated. The teachers are, to a great extent, active researchers and refer to their research in their teaching. In a number of cases they have also produced their own material for use in their teaching.

Many of the students study part-time and in some cases also as distance students, so the level of their attainment is not particularly high. On the other hand, the standards of the essays written in most of the programmes are good. The panel of assessors points out, however, that the programmes offer only limited possibilities of learning to speak the languages for students who do not go abroad to study. The situation is worst for Sami where there is a shortage of teachers with PhD's who have Sami as their first language, so that most of the teaching is offered in Swedish.

The special measures for the small languages adopted by the Research Council have had a positive effect and helped to create sound research environments. Even though these are extremely small, the teaching offered is of

good quality. With the current volume of postgraduate study, it is likely that there will be qualified teachers for the posts that can be expected to become vacant in the future.

The Swedish National Agency for Higher Education questions entitlement to award bachelor's and master's degrees in Finnish at Uppsala University. There are shortcomings in the programme with regard to teaching resources and links between the teaching and research.

Physical planning – a small subject with good quality

Physical planning is an interdisciplinary subject intended to define and clarify the use and design of space from a strategic and dynamic perspective. Undergraduate and postgraduate programmes in physical planning are offered only by Blekinge Institute of Technology.

The panel of assessors discovered many quality features in the educational setting. The teaching was well organised, the teachers committed and the majority of students satisfied with their programme. One problem is, however, that a relatively large number of students drop out after the first year. In addition many students fail to finish their degree projects and therefore do not complete the programme. The panel urges the institute to review these circumstances systematically and to adopt measure to reduce the number of drop-outs.

The panel of assessors also stresses the importance of more theoretical content in courses from the first year onwards and recommends review of reading lists to enhance links with research and encourage students to think critically. The Agency considers that these recommendations are well grounded and relevant.

The panel of assessor also points out that research in this field is largely funded externally. As postgraduate studies are offered in a network, this means that the environment for postgraduate programmes at Blekinge Institute of Technology is fragile.

The Swedish National Agency for Higher Education agrees with the panel's recommendation that a strategy for postgraduate programmes should be developed, not least for the sake of the subject and to improve the possibilities of future recruitment of teachers with postgraduate qualifications in the subject.

Human geography and geography – interest in the subject could decline and quality could be eroded in the long run

Geography comprises a general and wide-ranging area of study which by nature is multidisciplinary. In the early 1950s the subject was divided into two separate fields – one based on the natural sciences, the other on the social sciences. In the social science based area an economic or human-geographical focus was normally adopted. Since then a number of departments of human geography have developed. However geography still survives as a subject in its

own right and can be studied in the context of teacher-training programmes and also in single-subject courses. In organisational terms geography may be assigned to different faculties, but in terms of content it can comprise either human geography or natural geography.

Teaching is offered in human geography and geography to at least bachelor's level at 14 higher education institutions and seven of them offer postgraduate programmes in human geography. Recruitment is relatively sound at lower levels, but most students only take the subject for one or, at the most, two semesters. This means that the educational contexts for the more advanced levels (C & D – third and fourth semester – levels) are very modest. This applies to an even greater degree to postgraduate study. The panel of assessors feels that if student numbers are too low the subject will suffer, with far too many untaught courses, inadequate or no seminar culture and no capacity to provide a critical or creative environment.

Overall, however, the quality of the programmes is good, both in terms of the content of undergraduate and postgraduate programmes and the teaching provided. The main branches of the subject are generally well represented and the content has links with current research. In the evaluation the teachers are described as knowledgeable and committed. Even though they do not all have the possibility of devoting themselves to improving their own professional skills and their own research to the extent that they would like, research links in the teaching are considered to be satisfactory.

The panel of assessors points out, however, that there are problems, of which some are grave enough to pose future threats to the attainment of the standards required in higher education. The most obvious weaknesses in the programmes as a whole concern the extent of the teaching offered and the often burdensome working conditions of the teachers. What is also striking is the uneven gender balance among the teachers, of whom very few are women. In addition many educational settings are so small that there is a risk of erosion of the quality of the programmes. The situation is particularly problematic for programmes in geography. Student recruitment is low and there is little regeneration of teaching staff.

The Swedish National Agency for Higher Education is questioning entitlement to award bachelor's degrees in geography at Kristianstad University College. This is based on the failure of the programme to attain the academic level required for award of a bachelor's degree.

Literature and rhetoric – engrossing subjects with uneven quality

Literature can be studied up to at least bachelor's level at 19 higher education institutions. At eight of these postgraduate programmes in literature are also offered.

The evaluation reveals that there is major commitment to the subject both by students and by teachers. With one or two exceptions, the qualifications

of the teachers are high, but in several places there is a feeling that resources are scanty.

The subject has its obvious focus on Swedish literature. Discussion is continually going on about the organisation of the programmes, but at most places there is a dearth of discussion about the identity of the subject in the current and future systems of higher education.

Generally speaking there is a perception that the proficiency of newly enrolled students in Swedish has deteriorated. The evaluation also shows that many students devote less than 40 hours per week to their studies even though they are full-time students. The assessors are concerned by the low demands made in some programmes.

Many of the departments responsible for the subject have considerably larger volumes of teaching in teacher-training programmes than for students taking literature alone. The panel of assessors considers this to be a problem, particularly at the smaller higher education institutions. In addition to potential erosion of their financial situation, there is also a risk of adaptation of the contents of the literature courses to suit the specific needs of teacher trainees.

Increasingly seminars have become the predominant form of teaching in programmes in literature, in which the actual discussion of different texts and their interpretation is central. The assessors are therefore hesitant about the suitability of offering today's courses in literature solely in the form of distance teaching, as is the case at one higher education institution.

At some higher education institutions offering postgraduate programmes the postgraduate student population is too small. Otherwise the situation of postgraduate students is sound where supervision, material resources and inclusion in the life of the departments are concerned.

One improvement measure proposed to the higher education institutions is the organisation of regular national disciplinary conferences to discuss the level of the demands made in undergraduate courses. More internationalisation, cooperation and the adoption of profiles are other proposals that are made.

Programmes in rhetoric are offered at three higher education institutions in Sweden, and one of them also offers postgraduate study in the subject. Rhetoric deals with issues that are central in a democracy. The panel considers that programmes in rhetoric in Sweden are very interesting and full of promise.

The Swedish National Agency for Higher Education questions entitlement to award bachelor's and/or master's degrees in literature at Jönköping University College, Linköping University; Luleå University of Technology and Mid-Sweden University. This is based to varying degrees on shortcomings in the qualifications of teachers and links with research, the lack of a critical and creative environment as well as restricted volume and organisational instability.

Special education

– a programme with a weak research basis and unclear aims

The programme that concludes with the award of a qualification in special education changed during the 1980s and 1990s, both in terms of the conditions on which it was offered and content. Previously this programme focused to a greater extent on practical skills for dealing with pupils with different kinds of disabilities and learning difficulties, whereas attention is now directed more at advising on methodology, supervision and educational development.

This shift, which admittedly reflects the wishes of the authorities, has been taken so far at many higher education institutions that the main contents of the programme – which is still intended to provide knowledge and skills to enable active work with pupils in need of special support – have been obscured. As a result the future special teachers receive less training in working directly with pupils who need support and this work is largely delegated to teachers who have not received any advanced training. It is not part of the Agency's ambit to assess the suitability of this shift, but it is manifest that more explicit directives are required for this new more comprehensive special teacher role and probably also a new focus in teaching qualifications so that pupils with special needs do not end between two stools.

Evaluation of the quality of programmes in special education also reveals a problem linked to the multidisciplinary nature of the subject. The research that has been carried out has not always been categorised as related to special education but could comprise everything from practical treatment of children with speech impediments to theoretical studies of various educational approaches. The panel of assessors points out that there is very little research-based knowledge about the practical activities of special teachers.

A largely negative picture of the programmes evaluated is presented by the report of the panel of assessors. In many cases the programme is offered as a marginal activity without any organisational basis of its own. The majority of the teaching staff do not have PhD's and in many cases lack any first-hand experience of research. The quality of the degree projects reviewed also varies widely. Only one of the programmes, at Malmö University College, is offered in what can be described as a satisfactory research and teaching environment for special education.

The Swedish National Agency for Higher Education questions entitlement to award qualifications in special education at Umeå University and the Stockholm Institute of Education. This is based on shortcomings in the qualifications of the teachers and capacity for supervision.

Statistics and demography – subjects with recruitment problems

Programmes in statistics are taken by a relatively large number of students. However, the majority only take a few courses for no more than 10 credit points in their first semester. Recruitment to more advanced levels is very poor.

The evaluation reveals that statistics is a subject that often leads a very anonymous existence at the higher education institutions. It normally forms part of a large department with few or no subject representatives in decision-making bodies. Often it functions as an ancillary subject in other degree programmes.

Statistics is a subject that requires practical training in small teaching groups. But as it is classified as a social science subject rather than one of the natural sciences, resources for laboratory work are restricted and this has a negative impact on the quality of the programmes. Many students consider it to be a difficult subject, which may be one reason why so few go on to more advanced study.

The very weak recruitment to the more advanced levels (C and D levels) and postgraduate study is a major problem, not only for the survival of the subject in the long run but also for the provision of the statisticians that will be needed by the community in the future. Here measures are probably required to raise the status of the subject and to stimulate greater interest among pupils while they are still in upper-secondary school.

The research undertaken in the subject also needs to be developed. Today many higher education institutions have difficulties in acquiring enough external funding to be able to develop a stable basis for research. This limits the possibilities for teachers to carry out their own research, which in the long run could make it more difficult to provide links with research in their teaching.

The quality of the teaching offered today is, however, on the whole good or acceptable. None of the programmes evaluated revealed shortcomings that gave rise to any question about their entitlement to award degrees. However, the panel of assessors made recommendations relating to the organisation of the programmes, teacher qualifications and the recruitment of students.

Programmes in demography are only offered by the Department of Sociology at Stockholm University. This is an interdisciplinary subject by nature and can either have a quantitative/statistical focus or, as at Stockholm University, concentrate on sociology and human geography. Demography is also taught to a significant extent at the universities of Umeå and Lund. It is important for support to be provided for the small community of demographers that exists in Sweden by further development of the excellent national and international contacts that have been established.

Political science – popular programme with qualified teachers

The Swedish National Agency for Higher Education has evaluated undergraduate and postgraduate programmes in political science and also the subjects of peace and development research, developing countries studies, European studies and Latin American studies.

Undergraduate teaching in political science is offered at 18 higher education institutions, of which 12 also offer postgraduate programmes. Programmes in political science are generally good and very popular among students. There

are often many applicants for each place offered. The qualifications of the teachers are also high and there is a good supply of teachers with PhD's. However there is a great variety in the size of student populations.

Several of the small environments have made up creatively for their lack of size through various forms of cooperation. They have often also adopted profiles to enable teaching at more advanced levels to match the particular areas of expertise of their teaching staff. This is probably necessary but it is important to indicate clearly what the profiles consist of and to ensure that they are not so specific that student mobility between the different higher education institutions is prevented.

The extent of classroom teaching is on the whole low, usually 5-6 hours each week or less. At certain higher education institutions the teachers only have limited scope to undertake research within their posts. On the whole this means that there is a risk that links between teaching and research may be weak. In several cases criticism is also expressed of the extent and content of the teaching of methodology, and also of internationalisation measures.

Peace and development studies and area studies are multidisciplinary subjects in which the various elements are often provided by teachers with part-time appointments from a number of different disciplines. One problem for these programmes is organising effective coordination between teachers and their different courses. A general problem is that the links between the programme and subsequent employment are weak.

At several of the larger research departments enrolment to postgraduate programmes has been suspended even though many qualified supervisors are available. At the same time students are being admitted to postgraduate programmes at higher education institutions with considerably fewer qualified supervisors. The panel of assessors considers this to be unsatisfactory and recommends reallocation of resources or greater cooperation between the higher education institutions.

The Swedish National Agency for Higher Education is questioning entitlement to award bachelor's degrees in political science at Kalmar University College, entitlement to award bachelor's and master's degrees as well as licentiate degrees and PhD's in political science at Jönköping University College and entitlement to award postgraduate degrees in political science at Växjö University. The grounds are varying degrees of shortcomings in teacher qualifications and links with research, shortcomings in the teaching of methodology, inadequate academic environments or supervisory capacity in postgraduate programmes.

Postgraduate programmes in the technological sciences – good standards but dependence on external funding poses a threat

Postgraduate programmes in the technological sciences are offered at 12 higher education institutions in Sweden. In terms of volume these programmes are very extensive. When the evaluation was carried out there were about 2,000

supervisors dealing with 3,500 postgraduate students. The number of subjects studied is also very large – degrees are awarded in about 300 different subjects. For this reason this evaluation was carried out at faculty level. It is worth noting that 5 of the higher education institutions evaluated account for 90 per cent of the programmes.

Generally speaking the quality of these programmes is high. The Swedish National Agency for Higher Education has found no grounds for questioning entitlement to award degrees at any institution, even though there has been a certain amount of hesitation in a few cases. The small environments in particular need support to provide long-term assurance of their quality.

One factor that has contributed to this positive impression can be found in the tighter organisation and structure that has been applied to postgraduate programmes at many higher education institutions. There is clear emphasis on completion of programmes in the time allowed. Students often work in research groups or graduate schools. The range of courses offered has been planned more carefully and supervision is often assigned to several individuals.

What is characteristic of postgraduate programmes in the technological sciences is the scope for external funding. These programmes are largely based on cooperation with industry and the commercial sector, alongside funding from the major research foundations. The proportion of external funding at the different higher education institutions varies from 45 to 70 per cent.

This major dependence on external funding could pose a threat to these programmes. There is a risk that those providing external funding may influence the research by demanding results that focus more on technological development and the application of known research than on new research findings. There is also a risk that the detailed descriptions of the expected results required in applications for external funding may make it more difficult to formulate speculative projects.

The panel of assessors observes that enrolment to postgraduate programmes in the technological sciences has declined. There is some concern about the difficulties that may arise in meeting the targets for the award of degrees. At the same time enrolments on programmes leading to licentiate degrees is extensive. On average two out every five of those enrolled are aiming for this degree, which does not fit in with the intentions that underlay the introduction of this possibility. The panel of assessors points out the significance in this context of the fact that external funding is often provided for two to three years.

The areas in which varying degrees of improvement are required at the different higher education institutions include gender equality measures, internationalisation, cooperation with the commercial sector and follow-up to determine what happens to graduates after completion of their programmes.

East Asian languages – language teaching rather than university studies?

Teaching is offered in East Asian languages – Japanese, Chinese and Korean – to at least bachelor's level at four higher education institutions in Sweden. Postgraduate programmes are also offered at three of them.

The quality of these programmes varies, but can on the whole be described as good. There has also been greater demand for these programmes in recent years. Some of them even have large numbers of applicants. Throughput is however in several cases less satisfactory, which is mainly due to the high drop-out rate.

Many teachers are described by their students as very committed and inspiring. The students are often eager to learn as much as possible even though study of these difficult beginner languages makes considerably greater demands of the students and their teachers than a number of other subjects.

Teaching in the three languages is provided by teachers whose first language is Swedish and with teachers whose mother tongues are Chinese, Japanese or Korean. Students therefore have a very good chance of learning the spoken language. They are also offered a wealth of opportunities to probe the cultures and social settings of these countries through their continual contact with teachers who come from them.

In the teaching the emphasis is on language proficiency, which is also what the students want. One problem in this connection is that undergraduate courses tend to offer “language teaching” rather than university study. The teaching of life and institutions is limited in a number of programmes. The same applies to courses in theory and methodology and other aspects that offer preparation for research. Essay writing does not function totally satisfactorily either.

The East Asian languages belong to the category of “small languages” in the world of higher education in Sweden, with all that this means in terms of resources and the supply of teaching staff. There are programmes that depend solely on one part-time lecturer, which of course is not satisfactory for the students or for the teachers themselves. The consequence is heavy teacher work loads and little time for any research of their own. The Swedish National Agency for Higher Education wishes to emphasise how vitally important it is for genuine research to be undertaken in the language units themselves, both for the development of the teachers themselves and so that teaching can be based on research.

The Swedish National Agency for Higher Education is questioning entitlement to award bachelor's and master's degrees in Chinese at Uppsala University and in Japanese at Lund University. These programmes have shortcomings where teacher qualifications are concerned as well as in the links between teaching and research.

Many appraisals – few questions about entitlement to award degrees

During 2005 the Swedish National Agency for Higher Education has undertaken a total of 214 appraisals. In 17 programmes these have revealed such grave quality defects that entitlement to award degrees has been questioned. This corresponds to about eight per cent of the programmes evaluated. In two cases postgraduate degrees were involved, both in political science.

On the whole standards are satisfactory or good, even though there are some disturbing trends.

Several environments are small and vulnerable. This applies for instance to the modern language programmes that have been evaluated. Inadequate teacher qualifications and lack of links with research are other problems that are often observed, as are the working conditions of the teachers and the limited scope for their own research. The amount of classroom teaching is also small, particularly in the social sciences and humanities. Several reports point out that quality can only be maintained thanks to the self-denying commitment of dedicated teachers, which is not felt to be sustainable in the long run.

Government assignments and special studies

In addition to the evaluations of subjects and programmes, the Swedish National Agency for Higher Education also undertakes other evaluations of quality in higher education. These can, for instance, involve review of applications for entitlement to award degrees or thematic evaluation of specific areas of activity in higher education. Some evaluations are launched on the Agency's own initiative, other are requested by the government. Two tasks undertaken at the behest of the government during the past year were the quality evaluation of the National Defence College's programmes and a review of the Swedish Net University.

Appraisal of officer training programmes

The government gave the Swedish National Agency for Higher Education the task of evaluating officer training programmes offered by the Swedish Armed Forces training establishments and the National Defence College. This task also included assessment of the quality assurance procedures of the programme providers and the proposal of any measures that may be required. After external evaluation by special experts and site visits, the Agency reached the following conclusions on the basis of the opinion of the experts.

An evaluation of some of the training programmes offered at the National Defence College had already been undertaken in 1998 by the Swedish National Agency for Higher Education. It can now be seen that the Defence College has followed the recommendations made by the panel that made this evaluation. A healthy research environment has been developed, which has enhanced academic standards. This has resulted in improved quality in the advanced officer training programmes. The panel of assessors also considers that quality assurance procedures are, on the whole, sound.

In the courses offered by the Swedish Armed Forces training establishments the picture is not as positive. Here a new training programme for professional officers has been proposed that the panel of assessors does not consider to fulfil academic requirements. The academic content has been reduced in comparison with previous programmes. There is a risk that this new proposal could erode the foundation on which the good standards of other programmes are based.

The Agency also points out that there are a number of obstacles to prevent the National Defence College from being entitled to award degrees and placing its programmes on the same footing as those offered by civilian higher education institutions. One of them is, for instance, that the funding for the

National Defence College derives in principle from courses commissioned by the Swedish Armed Forces and that enrolment and selection procedures for officer training programmes are not compatible with the system of higher education.

Development of flexible learning through the Net University

In 2004 the Swedish National Agency for Higher Education was asked by the government to review the cooperation of higher education institutions in Sweden's Net University and to assess the contributions made to the development of this organisation by the Swedish Agency for Networks and Cooperation in Higher Education. During the year this review has resulted in two reports that evaluate the way in which the Agency works and its support to these programmes as well as how it has helped to increase accessibility to higher education and recruitment.

The work of the Agency is perceived by the assessors to be good, but they point out that a more proactive stance to the higher education institutions is desirable, particularly in view of the way in which the task assigned to the Agency has now been extended. Greater clarity about the grounds on which development funding is allocated is desired, as is systematic monitoring of the outcomes of projects.

The assessors have a highly positive opinion of the way in which the Swedish Net University has helped to make higher education more accessible. The range of courses is wide and many new courses have been created especially for the Net University. As many as one-third of the students combine Internet study with on-campus study. Recruitment to higher education from environments where higher education is infrequent has risen and a large proportion of its students belong to older age groups and are returning to higher education. By and large, therefore, this form of education and organisation meets the need for the kinds of programmes that encourage flexible learning.

The Net University offers a wide range of short, single-subject courses. This suits many of those who apply for this form of teaching and who often take only a few credit points each semester. However, many students do not achieve the credit points they applied for. This means in its turn that throughput is considerably lower than average. However student performance has risen in recent years and many higher education institutions are actively endeavouring to improve it.

Evaluation of specific areas of activity

The Swedish National Agency for Higher Education has previously published two reports, one on internationalisation at the higher education institutions, the other on their cooperation with their surrounding communities. During

2005 the Agency has published two anthologies of examples of good practice in each of these areas.¹ During 2006 an evaluation will be undertaken on the theme of study support. The evaluation will focus in particular on student counselling and student health services.

1. Goda exempel på internationalisering, (2005) and Högskolar samverkar – goda exempel (2005)

Some in-depth reflections

In this section a few in-depth reflections prompted by the evaluations in 2005 will be accounted for. The first of these concerns programmes in the technological sciences, of which all have now been appraised. The second reflection deals with the impact on the development of subjects and programmes of co-operation with teacher-training programmes. Teachers' working conditions and the difficulty they have in finding time for enhancement of their own skills and their own research has been stressed in the evaluations from 2001 and onwards, as have the kinds of problems associated with external funding of research, and they are again referred to in this year's evaluations. The chapter concludes with an account of how the panels of assessors for the 2005 evaluations were put together. Particular attention is paid to vocational perspectives and those of potential employers.

Evaluation of programmes in technological sciences

All of the programmes and courses in the technological sciences have now been evaluated. The 2005 evaluations covered programmes leading to the award of master's degrees in engineering and certain subjects in the technological sciences. In 2002 the programmes that led to the award of diplomas and bachelor's degrees in engineering were evaluated together with certain technological subjects. What image emerges of this disciplinary area? Are there similarities in the problem areas identified by the panels of assessors? What challenges do these programmes face?

Recruiting problems

About 50,000 students are taking programmes in the technological sciences. In 2002, when shorter programmes in engineering were evaluated, about 200 of these programmes were offered at 25 higher education institutions to a student population of about 20,000 students. Master's programmes in engineering are offered at 11 higher education institutions and total just under 100 in number. They are taken by 24,000 students. Postgraduate programmes in the technological sciences are offered at 12 higher education institutions to about 3,500 students. This means that about one postgraduate student of every four in Sweden is studying in the field of the technological sciences. The total proportion of women undergraduate and postgraduate students in this area is about 26 per cent.

Recruitment both to shorter programmes in engineering and master's programmes has declined in recent years despite recruitment drives. For both groups of students special programmes have been designed in popular areas or programmes have been given new attractive names to improve recruitment.

The numbers enrolled in postgraduate programmes have also declined. Evaluation of postgraduate programmes in the technological sciences shows that newly recruited postgraduate students mainly come from within the higher education institution. Nearly 90 per cent of the postgraduate students are taking programmes at five of the higher education institutions evaluated.

All three evaluations drew attention to the particular problem of recruiting women to the programmes. In postgraduate programmes, however, the ratio of women has been rising for some considerable time. Today, however, there is concern that this development could be about to reverse. One reason may be the reduction in the number of women taking master's programmes in engineering as these provide the largest catchment area for recruitment to postgraduate study in technology. The evaluation of postgraduate programmes also draws attention to the lack of women supervisors. The Agency pointed out in its report *Forskarutbildning och forskarkarriär – betydelsen av kön och socialt ursprung* (2006) that the technological sciences are one of the subject areas with the largest differences in possibilities of obtaining a professorship for men and women.

Bewilderment of choice

A problem shared by all the programmes in technology is that the range of programmes and subjects offered is large and far too impenetrable. The evaluation of the master's programmes noted that there were a large number of "narrow" programmes, i.e. programmes that had specialised technological contents and/or focused on restricted career opportunities. The shorter engineering programmes also had too many specialisations in the opinion of the assessors. The result is that many programmes have very few students. Both panels of assessors recommend fewer, broader-based programmes. This would provide greater clarity and the system would be more flexible. The evaluation of postgraduate programmes states that strategic discussion of the number of subjects in which to offer postgraduate study is important.

Technological programmes that contain too little technology

In the evaluations of the master's programmes and of the shorter programmes in engineering, both panels of assessors note that there are some programmes with too little, or almost far too little, coverage of technological subjects to allow them to be described as engineering programmes. In the evaluation of the shorter programmes it was found that 28 of the slightly more than 200 programmes did not include adequate mathematical or technological content and the entitlement of these programmes to award degrees was questioned. The programmes that had shortcomings of this kind were often those that had been created to improve recruitment, i.e. new programmes with attractive names that lacked subjects of central importance for an engineer. Questioning the entitlement to award degrees has resulted in the adoption of measures on the part of the higher education institutions. Either the contents of the pro-

grammes have been altered and their syllabuses amended or they have been withdrawn.

Contacts with business and industry

All three evaluations raise the issue of cooperation with the commercial sector. In the evaluation of master's programmes in engineering the panel of assessors emphasises the need for active contacts with potential employers and the importance of providing students with knowledge about entrepreneurship. The evaluation of postgraduate programmes focuses in particular on the importance of contacts and cooperation with the commercial sector from several points of view: to determine relevant research problems, to create more viable networks and to make it easier for postgraduate students in their future careers. Here too it is pointed out that programmes should have some entrepreneurial content. The evaluation of the shorter engineering programmes states that cooperation with the commercial sector is of great importance. This cooperation should, however, be more strategic.

Inadequate internationalisation

The three evaluations also place particular stress on internationalisation. Endeavours are made in this area but there is a great deal more that can and should be done to encourage, for instance, undergraduate and postgraduate students to pursue some of their study abroad. This applies in particular to the shorter engineering programmes, where the Agency in its reflections on the evaluation came to the conclusion that internationalisation is one of the least outstanding aspects of these programmes.

Inadequately prepared students

In the evaluations of both the master's programmes and shorter programmes in engineering, the assessors refer to the deterioration of the skills of students coming from upper-secondary school. This is said to be one of the reasons for the low throughput in the master's programmes. In the shorter engineering programmes, lack of knowledge in mathematics and mechanics is considered to be the cause of low success rates, above all in the first year of study.

Good quality despite common problems

A number of common problems are referred to above. It is important to present them, not least because they are shared by all the programmes in the technological sciences. But they do not prevent the assessors from pointing out that the quality of these programmes is high. This applies to postgraduate programmes, master's programmes in engineering and also to most of the shorter engineering programmes. Those graduating with master's degrees in engineering are generally speaking very well qualified. This is also very important for Sweden and Swedish industry. The same is said of the shorter engineering programmes.

Subjects that cooperate with teacher-training programmes

In its evaluations the Swedish National Agency for Higher Education has pointed on several occasions to the important of cooperation within and between the higher education institutions. This has applied in particular to programmes or subjects with low student numbers. Several good examples of this kind of cooperation have been presented in the context of previous evaluations. There are, however, examples of less successful cooperation. In this year's evaluations, some problems are demonstrated that can arise in the cooperation between teacher-training programmes and traditional subjects that are offered as single-subject courses or as components of other degree programmes. The examples below are taken from the evaluations of literature and of biology.

Literature

Literature can be taken as a single-subject course for inclusion in a bachelor's and/or master's degree at 19 higher education institutions, of which most also offer teacher-training. Teachers in the subject are also usually involved in courses for trainee teachers of Swedish. This teaching is now offered in the form of elective courses in the new teacher-training programmes. It is commonly felt by teachers of literature that the new teacher-training system has deprived them of many students who would otherwise have gone on to more advanced study of literature as a subject in its own right. Many have pointed this out as one of the contributory causes of the decline in funding for their subject.

At the large universities the numbers of students taking single subject courses are still large enough to ensure broad expertise among the teachers and continuity in more advanced studies at C and D level. The smaller higher education institutions have been compelled to counter the decline in student enrolment to single subject courses with different strategies. The feature shared by all these solutions is that they are intended to take advantage of synergy effects. As far as possible all the students, both trainee teachers and others, take the same courses.

However, it has turned out that all solutions of this kind inevitably lead to certain changes in the content of the courses. Subject-specific courses for trainee teachers usually place greater emphasis on educational aspects of the subject and features such as literature for children and young people or those areas of literary sociology that deal with what these groups read. The inclusion of material of this kind can steal time from reading the literary canon and the study of fundamental theory usually included in single-subject courses. Moreover, if the courses required by teacher-training programmes provide more generous and more reliable funding for posts than the single-subject courses, the recruitment of new teachers of literature may easily focus on specific qualifications and in the long run reduce the pooled expertise available in the subject.

Biology

The evaluation of undergraduate and postgraduate programmes in biology revealed similar problems. The nature and the magnitude of the problem are often linked to the status of biology as a subject at the higher education institution.

In many higher education institutions biology is a major, central subject with an explicit identity of its own and with one or more subject-specific programmes. There are, however, a number of cases where the position of biology as a subject is not as central and the courses offered in programmes are influenced to a greater degree by the focus of these programmes on specific vocational training. This applies, for instance, to the programme in horticulture at the Swedish University of Agricultural Sciences.

At other institutions the biology programme has come into existence as a supplement to a teacher-training programme and in some of these cases the position of biology as a subject is unclear. At some of the smaller higher education institutions it is clearly stated that biology is an ancillary subject to other subjects and it is also given low priority by the faculty.

A number of higher education institutions have integrated biology programmes with those offered for trainee biology teachers, but this has taken many different forms and attained varying degrees of success. At some higher education institutions the programmes are distinct, but at most of them students take some courses in the subject together. The integration of educational theory varies in the same way: it may be kept totally separate from the subject teaching or made a compulsory element for all students.

In the evaluation of biology, the Swedish National Agency for Higher Education is questioning the entitlement to award bachelor's degrees in the subject at two smaller higher education institutions. This is precisely because cooperation/joint study between biology students and trainee teachers does not have positive outcomes. Both the Agency and the assessors point out, however, the important role played by teacher-training at both institutions and the many positive features of the biology teaching from the teacher-training perspective. However, the conditions for students preparing to take degrees in biology are unsatisfactory. These biology programmes are totally dominated by teacher-training considerations and educational theory plays far too influential a role. This means that there is not sufficient focus on the elements devoted solely to biology, both theoretical and practical. In planning the courses too much consideration has been given to the needs of trainee teachers.

Educational breadth and academic freedom

Ever since the evaluations of subjects and programmes began in 2001, the time available for teachers to undertake research within their posts has been a recurrent issue. It has been pointed out that this time is increasingly restricted as a result of financial cuts and the need for external research funding so that

the possibilities of linking teaching with research will decline. In the evaluation reports this year this problem is also referred to (Finno-Ugric languages, statistics, biology, master's programmes in engineering and work science). The evaluation of work science provides a graphic description of the impact on the academic ideal and academic freedom of the efficiency and results demanded by external funding agencies.

The deterioration in financial conditions influences both undergraduate and postgraduate programmes. It is pointed out, for example in the evaluation of master's programmes in engineering, that economic cuts have resulted in teachers facing larger groups with less interaction, which has a negative impact on the students' ability to think critically. It also provides less scope for features that will help to broaden their educational horizons. The prolongation of the programme proposed in the evaluation and which has now been decided by the Riksdag could provide more scope for the inclusion of features like this that could be integrated into the programme as a whole.

The evaluation of programmes in literature reveals that the ideal of educational breadth may not necessarily be attained in a traditional humanistic subject when vocational links are allowed too great a sway and when the possibility of offering teaching in the form of seminars is restricted.

Similar conclusions are drawn in the studies of academic freedom undertaken by the Swedish National Agency for Higher Education since 2001.² The most recent of these is *Akademisk frihet i praktiken – en rapport om tillståndet i den högre utbildningen* (2005), which is based on a questionnaire survey and interviews. It discusses the problems linked to the demand for external research funding, from the point of view of undergraduate programmes and students as well. The responses to the questionnaires and the interviews reveal that both teachers and students consider that research and teaching are not characterised by the close links that the Higher Education Act prescribes. For example examinations favour mechanical learning rather than the independent pursuit of knowledge. Teachers consider that there are no obstacles to prevent reference to research findings in their teaching, but that shortcoming in the students' prior knowledge makes it more difficult to do so. Where research is concerned there is a shortage of money and the tough competition for the funds available means that a great deal of time has to be devoted to applying for them. The possibilities of undertaking research in their working hours have become increasingly restricted and pure research posts are fewer in number.

Generally speaking, the picture of the scope for educational breadth in higher education painted by those working in the various institutions is a fairly sombre one. Academic freedom is stipulated in the statutes and ordinances but is increasingly circumscribed, mainly as a result of economic, structural and organisational factors. Future evaluations and follow-up studies will focus on this problem so that these fundamental values – educational breadth and

2. Degerblad & Hägglund, *Akademisk frihet – en rent akademisk fråga* (2001), Bennich-Björkman, *Överlever den akademiska friheten?* (2004).

academic freedom – will form a better integrated component in both undergraduate and postgraduate programmes.

The assessors

The Swedish National Agency for Higher Education places great emphasis on the composition of the panels of assessors. These are to consist of subject experts as well as undergraduate and postgraduate students. If evaluations deal with programmes that lead to the award of a vocational qualification, the panels also have to include a representative of future employers or professional practitioners. The panels of assessors must always include an international dimension, which is guaranteed either by appointing assessors from other countries or Swedish assessors with international experience. During the period 2001-2005 the foreign members of the panels have come from over 50 different higher education institutions, mainly in the Nordic countries. The assessors must have a good reputation and legitimacy in the sector. Personal integrity is of no less importance. The Agency appoints the panels of assessors. The programmes to be evaluated are allowed, however, to propose names.

A total of 108 assessors were involved in the panels for the twelve evaluations undertaken during 2005. Of these 53 were women and 55 men. The groups have included 24 undergraduate students and 17 postgraduate students. The panels for this year's evaluations have included seven representatives of future employers or professional practitioners. In addition to the evaluations of the master's programmes in engineering and of programmes in special education, which both lead to the award of a vocational qualification, labour market representatives were also involved in four other subject evaluations. Of the subject specialists 55 per cent were international experts, mainly from the Nordic countries but also from Germany and Scotland.

Table 2: Composition of the panels of assessors, total

Assessors	Women	Men	Total
Subject specialists	23	37	60
Undergraduate & postgraduate students	27	14	41
Labour market representatives	3	4	7
Total	53	55	108

Employers' perspectives

Several perspectives and purposes characterise the evaluations of subjects and programmes. They are intended to provide a basis for development at the higher education institutions themselves, determine whether the programmes attain sufficiently high standards and also offer information about the quality of programmes. One important target group for this information consists of (future) employers, who are also offered an opportunity to express their opinions about the quality of the programmes and influence how the evaluations are conducted. This influence is exerted in a number of ways. One is through

the appointment of employer representatives as assessors. Another is provided by the hearings and other methods used by the Agency to sound out different opinions. Yet another opportunity to acquire the opinions of representatives of the labour market is provided by the feed-back conferences arranged from three to five months after publication of the evaluation reports.

The most explicit statements about the vocational relevance of the programmes are made in the evaluations of the master's programmes in engineering and the postgraduate programmes in technological sciences. The first contains very positive comments and it is pointed out that companies with experience of employing graduates in engineering from different countries have the impression that Swedish master's programmes compare very well and therefore offer sound preparation for professional activities in their field. Where the postgraduate programmes are concerned a somewhat different opinion is expressed. Here, the panel emphasises that those awarded PhD's in technology are well prepared for academic careers but less so for careers in industry or as entrepreneurs and it would like to see more research that has links with industry. This would help to establish networks and provide the impetus for careers in specific companies. The assessors would also like the programmes to contain more elements relating to entrepreneurship, which is also one of the desires of the panel evaluating the master's programmes in engineering.

The assessors evaluating work science "recommend the higher education institutions to extend their contacts with those working in the field" and similar recommendations are made about the programmes in special education. Here it is pointed out that vocational relevance is not always clear and that the expectations of the profession and the focus of the programmes do not always coincide. In the evaluations of biology and political science the assessors also express a desire for improved preparation for careers outside higher education.

The overall impression from the 2005 evaluations is that programmes are primarily adapted to future careers in higher education but that they could include more elements that focus on future careers in the labour market. This applies above all to programmes that lead to the award of a vocational qualification, but also to subjects that lead to the award of a general degree or postgraduate qualifications. This also confirms the impressions that have been reported from the Agency's labour market programme, most recently in the report *Ekonomer – utbildning och arbetsmarknad* (2006). This points out that the contacts that the higher education institutions have with each other and with the labour market are fewer than desirable and also that knowledge about the careers of alumni is limited. Acquiring data of this kind is a natural element in the quality assurance procedures of higher education institutions in several other countries.

In previous years the evaluations have indicated the need for surveys to gather information about the career choices of alumni and the relevance of their programmes to their professional activities. This information is impor-

tant for planning and implementing programmes. In a written submission to the government, the board of the Swedish National Agency for Higher Education recently drew attention to the importance of this kind of follow-up and proposed that the government should “task the higher education institutions with following up alumni at certain intervals”. The board added that special resources should be made available to enable surveys of this kind to be undertaken.³

3. Written submission to the government by the Board of the National Agency for Higher Education (reg. No. 69-570-06).

What impact do the evaluations have?

The Swedish National Agency for Higher Education's evaluation model comprises three components: self-evaluation, an external appraisal and follow-up. The third of these, follow-up, is not the least important. This is where the Swedish evaluation model differs from those applied in most other European countries, where follow-up often does not form an integral part of the evaluation.

Follow-up takes a number of different forms. Feed-back conferences can be regarded as follow up arranged three to five months after publication of the evaluation reports. If entitlement to award degrees is called into question, developments are monitored after one year when the programmes are required to submit an action plan to the Agency for review. During 2005, for instance, action plans covering 37 cases of entitlement to award degrees have been reviewed. It should be added that in none of these cases has entitlement been withdrawn. The higher education institutions have taken measures to avoid this. Follow-up can also take the form of special studies addressed to the vice-chancellors or those responsible for quality. However, the principal follow-up included in the Agency's evaluation model is arranged three years after publication of the report. The evaluations conducted in 2000 and 2001 for which the reports were published in 2002 have now been followed up. The nine evaluations covered in this follow-up comprised just over 200 appraisals.⁴

Clear evidence that the evaluations lead to results and effects is provided by the feed-back conferences and the action plans. Now that the first three-year follow-up has taken place there is also plenty of material to illustrate the impact of the evaluations.

The programmes or higher education institutions involved in the evaluations have responded to questions about which opinions and recommendations, either directed at specific programmes at a higher education institution or more general in scope, they have taken into account, which they have disregarded and why. In addition they were asked about the more general effects of the evaluations on the various programmes. These questions have been posed to the representatives of the programmes at departmental level and therefore the responses reflect departmental perspectives. The recommendations made by the panels of assessors and those endorsed by the Agency in its reflections are not binding. The decisions of the Agency, on the other hand, are binding, i.e. they lay down what has to be done, if necessary, by the higher education institutions in order to avoid the withdrawal of entitlement to award degrees.

4. This follow-up is described in a report published in May 2006.

The evaluations yield effects

This follow-up confirms many of the impressions that have emerged from previous studies, discussions at the feed-back conferences and the information reported in the action plans, for instance about the importance of self-evaluation. Self-evaluation has provided grounds for internal reflection. The follow-up responses say that evaluation has played an important role in internal development activities.

The evaluations have involved appraisal of activities that have stimulated and provided a basis for change. Some of the responses show that it has been difficult to determine which results and effects can be ascribed to the evaluations and which would have taken place anyway. One general experience from evaluation research is that the process of self-evaluation helps to identify areas of development and problem areas. The self-evaluation process is also one in which important issues are dealt with and solutions begin to take shape. When the evaluation report is published, many of these areas have already been identified and a normal reaction is to find that what is included in the evaluation report is by no means completely new. Nonetheless, the external appraisal and the evaluation report are important, not only in confirming that the areas already identified really are important but also in providing external opinions about and advice on how development work can be organised.

The follow-up shows that results of the evaluations have not generally been considered controversial or surprising. The recommendations have not been difficult to accept.

The follow-up has also demonstrated the value of being able to make comparisons with other higher education institutions. The evaluations have provided a national overview that it can otherwise be difficult to obtain. The feed-back conferences also show that the evaluations have had an important impact on disciplinary identity and in providing a context for the programmes themselves. Here some departments express a desire for more international comparisons.

The follow-up also confirms that the evaluations have been used to strengthen the position of a subject in an individual higher education institution. Internal decisions are also based on the evaluations.

A few higher education institutions pose the question of whether the benefits derived from the evaluations correspond to the expenditure and the work involved.

Different kinds of effect

More changes arising from the evaluations have been made at undergraduate level than at postgraduate level. Many of the concrete measures adopted have involved changes to existing activities, i.e. changes in syllabuses and the like, rather than the introduction of completely new courses or any more radical reorganisation of the range of courses offered.

The concrete effects of the actions plans that have been produced when entitlement to award degrees has been questioned have often turned out to be linked to teacher qualifications. The three-year follow-up now completed also shows that the situation of the teaching staff has been a recurrent issue in all of the evaluations. This may relate to the number of teachers and also to the circumstances in which they teach or carry out their research. According to the follow-up, no institution has challenged a recommendation to enhance the qualifications of teaching staff. The action plans that have been reviewed during 2005 indicate, as in previous years, concrete measures in the form of more teachers, improvement of research settings, review of courses and enhancement of subject content. The action plans also indicate that at times higher education institutions have opted to withdraw a programme. In the cases where no new staff have been appointed or scope provided for skill-enhancement, the three-year follow-up reveals that intentions to adopt such measures have been thwarted by straitened finances.

Cooperation, profiles and concentration

Three key terms have been used consistently by virtually all the panels of assessors during the five years in which evaluations of subjects and programmes have been taking place, in their recommendations about the adoption of profiles, cooperation and concentration. In the overall analysis above it has been pointed out that these proposals have been adopted at higher education institution level. The follow-up that has now been completed, which has been at departmental level, shows that that the recommendation to cooperate has really had an impact – individual departments have intensified their cooperation. Among the 2005 evaluations, the appraisal of work science programmes shows that higher education institutions have often opted to specialise their programmes in some direction. As a result the contents of different programmes can vary widely. The assessors point out, however, that profiling a programme too strongly may make it difficult for students to shift to another higher education institution.

In general, it seems as if the programmes have largely adopted simple and cheap recommendations, whereas those that involve greater changes within a higher education institution or in cooperation are not complied with to the same extent. One reason is, of course, lack of funding. Economic incentives are also important for ensuring the realisation of the plans to cooperate, adopt profiles and concentrate that exist at a number of higher education institutions.

Some examples

In the subjects of computer studies and computer science, most of the specific recommendations have been followed and the general recommendations have also been adopted in the majority of cases. It is above all in the departments'

own internal quality assurance procedures that the evaluations have been of greatest benefit. The national overview has also been appreciated.

In business administration the national overview and being able to make comparisons with others are also listed as positive. A number of departments have opted not to comply with some of the recommendations, which the follow-up reveals is mainly due to the feeling that the programmes do not have the shortcomings indicated by the assessors. Another frequent reason is lack of economic resources.

In classical languages most of the departments concerned react positively to the evaluation. It is pointed out the evaluation provides arguments that can be used in internal discussions and that resources for the subject have been enhanced in the form of more teachers, for example. The responses also indicate that national cooperation has intensified.

The departments offering mathematics have taken note of the recommendation to cooperate. This applies to those specifically recommended to cooperate and also to the recommendation in general. The departments have complied with the enjoiner to provide more qualified teachers by making further appointments and also through skill enhancement.

Swedish/Nordic languages is a subject in which virtually all the higher education institutions involved have followed the recommendation to appoint more senior lecturers and professors. A few institutions claim, however, that they lack the economic resources to enable teachers to be offered greater scope for skill enhancement and research within their posts.

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The conclusions that can be drawn from the first three-year follow-up are that it confirms in many respects the impressions given by the feed-back conferences and the action plans. The evaluations have had effects. The importance of the self-evaluation is maintained, but it is also pointed out that the evaluations provide a basis for continued internal reflection, development and decisions. Something else that is also mentioned as positive is the national overview and the possibility this offers to make comparisons. The three-year follow-up also shows that the higher education institutions not only take note of the Agency's decisions to question entitlement to award degrees but also the recommendations made by the panels of assessors. This applies both to recommendations made to individual higher education institutions as well as the more general ones that apply to a subject as a whole.

It can be added that the vast majority of those who are now working in higher education institutions have now experienced evaluations. This heightens awareness of quality assurance procedures and evaluations.

International perspectives

Awareness of how higher education in Sweden compares with other countries is important and is a significant element in the Swedish National Agency for Higher Education's evaluations. What is indicated by the 2005 reports?

Differences in structure and content

This year's evaluations confirm observations made in the surveys of previous years. For instance the structural differences between higher education in Sweden and in other countries give rise to comment. As a subject statistics is divided into statistics and mathematical statistics, the first belonging to social sciences faculties, the second mathematics and the natural sciences, which is unusual internationally. Applications with a social science focus predominate in Sweden while at the same time there is a manifest need of applications in the natural sciences and medicine, where advanced statistical methods are just as necessary.

In the evaluation of cultural geography, the assessors discuss the division of geography into a social science and a natural science subject. The social sciences links arose earlier in Sweden than in other countries and have helped to create a labour market for geographers, while at the same time the division into two subjects belonging to two different faculties has created problems for its disciplinary identity. It is pointed out that teaching in cultural geography in Sweden "can be seen to suffer from a dearth of excursions and field courses in comparison, for instance, with Denmark and Germany".

One observation that has been made in several reports in previous years concerns the length of time spent on the study of subjects within the framework of a degree. In this year's evaluations it is pointed out above all in connection with political science that the period of study for an undergraduate degree is considerably shorter than in Denmark and Norway. This is a structural difference that may be redressed through the Bologna process but which today can still cause problems in international student exchanges.

Quality comparisons

Some of the evaluations also contain direct statements about the quality of Swedish programmes in comparison with other countries. For instance post-graduate programmes in biology are assessed as maintaining "high to excellent academic standards".

Where the master's programmes in engineering are concerned, the assessors consider that "from an international perspective these result in engineering graduates of a very high standard". They point for instance to the international recognition exemplified by the cooperation of Chalmers University of Technology, the Royal Institute of Technology and Linköping University with Massachusetts Institute of Technology in the development of programmes in engineering. There is also an endeavour to further improve these programmes by extending them by one semester so that they are fully comparable with cor-

responding programmes in other European countries. This additional semester could include placement periods and some focus on entrepreneurship. In addition, the extra semester would provide scope for the inclusion of features to broaden the students' educational horizons throughout the entire programme. During the spring of 2006 the Riksdag has now decided on extension of the duration of these programmes.

International distinctions awarded to educational programmes in Sweden also offer valuable indicators. In the evaluation of physical planning the assessors note that "the programme's methodological principles and quality led it being awarded first prize by the Association of European Schools of Planning for 'Excellence in Teaching for Practice'".

Low participation in international student exchanges

One troubling development mentioned by most of this year's reports is the low participation in international student exchanges. This applies to undergraduate as well as postgraduate programmes. The assessors consider that Swedish students are spending less and less time taking some of their courses in other countries. Among the reasons given are the students' limited finances and their family circumstances. Where postgraduate students are concerned, the stringent stipulations about the period allowed for the completion of programmes is also referred to. The same assessment has been made in previous years and judging from this year's reports, this appears to be a negative trend. This is also confirmed in part by the Agency's report *En gränslös högskola. Om internationalisering av grund- och forskarutbildning* (2005) and by statistics in the Agency's National Monitoring database (NU).

What is happening in the international arena?

The Bologna Process and evaluation

The most recent meeting of the Council of Ministers within the framework of the Bologna Process took place in May 2005. It focused on three areas: degree systems, quality assurance and evaluation and the recognition of degrees and periods of study.

The Ministers were able to determine that a two-cycle degree system (bachelor's and master's) had largely been introduced and now officially adopted a system that included a doctoral cycle as well. They also decided that the work of developing national frames of reference for degrees should take place in harmony with the European reference framework⁵ and that this process should be completed by 2010. In addition emphasis was placed on the importance of *recognition of degrees and periods of study*.

With regard to *quality assurance and evaluation* the ministers noted that nearly all the countries involved in the Bologna Process have quality assurance systems but that further development is desirable, above all where student participation and international cooperation is involved. They endorsed the guidelines for quality assurance drawn up by ENQA⁶ and which were presented in last year's *How Did Things Turn Out?* This means that they also support the establishment of a European register of quality assurance organisations based on national evaluation of the organisations and the work of completing this process was assigned to ENQA in cooperation with EUA, EURASHE and ESIB. Finally the importance of collaboration between the national quality assurance organisations was emphasised, particularly in stimulating the development of mutual recognition of accreditation and other evaluation decisions.

Extensive European cooperation is taking place around the Bologna Process within and between four organisations in particular:

ENQA – European Association for Quality Assurance in Higher Education. Cooperation takes place within the framework of ENQA between more than 40 quality assurance organisations in over 30 countries.

ESIB – The National Unions of Students in Europe.

EUA – European University Association – the cooperation organisation of the European universities with more than 775 members in 35 countries.

EURASHE – European Association of Institutions in Higher Education – the European cooperation organisation for higher education institutions offering vocational qualifications

5. A Framework for Qualifications of the European Higher Education Area (2005). Ministry of Science, Technology and Innovation, Denmark.
6. Standards and Guidelines for Quality Assurance in the European Higher Education Area, (2005). ENQA. See ENQA's website: www.enqa.net.

The next meeting of the Council of Ministers, which takes place in London in 2007, will follow up these items and also deal with issues relating to flexible learning.

During the year the Swedish National Agency for Higher Education has asked an external panel of assessors to audit the Agency's evaluation activities in accordance with ENQA's guidelines. The panel, whose members included international experts and a student, consider that these evaluation activities comply with the requirements for inclusion in the European register.⁷ Sweden has now submitted this evaluation and its application to ENQA's board, the first country to do so.

Joint master's degrees

The Bologna Process also comprises recognition of "joint degrees" and in its press release from the meeting in Bergen in 2005 the ministers support continued development that will lead to recognition of degrees of this kind at all three levels.

The Swedish National Agency for Higher Education is responsible for the EU-funded Transnational European Evaluation Project (TEEP II) project, which is intended to develop methods for evaluating joint master's degrees, or rather joint educational programmes that are to lead to the award of joint master's degrees. This project is being undertaken with five other quality assurance organisations from Catalonia, France, the Netherlands/Flanders, the United Kingdom and Hungary. Its methods, which are based on ENQA's guidelines, are to be tested in the evaluation of three programmes that differ from each other: one in media, communication and cultural studies, one in law and economics and one that deals with hydroinformatics. These programmes differ greatly in their focus, length and structure.

The methodological observations that have been made up to now involve, for instance, question about which organisation or organisations are to be enabled to evaluate and accredit joint degree programmes. In addition discussions are taking place about what specific criteria are to be taken into account in the evaluation and how evaluations are to be conducted in concrete terms. Finally the programme's own quality assurance procedures are critical to its success. The project will lead to the production of four reports, one for each of the programmes involved and one on methodology. They will be published in August 2006.

7. Evaluation of National Agency for Higher Education, Sweden. According to Standards and Guidelines for Quality Assurance in the European Higher Education Area, December 2005, reg. No. 6-440-05.

Nordic Quality Assurance – NOQA

The quality assurance organisations in the Nordic countries – EVA, Finheec, the Swedish National Agency for Higher Education, NOKUT and the evaluation unit in the Icelandic Ministry of Education – have enjoyed close cooperation for many years. Representatives of the organisations meet every year and joint projects have been undertaken. Staff exchanges have taken place to enable in-depth comparisons between the evaluation systems in the different countries, which have been discussed at joint seminars. This network has now been given a more explicit structure, with a presidency that rotates from year to year and its own website, which will be launched at the beginning of June and will contain descriptions of the evaluation systems of the different countries together with reports from the annual meetings and joint projects. The address of this website is www.noqa.net.

The joint project that is being carried out in 2005-2006 involves interpretation of ENQA's guidelines for evaluation organisations. The aim is to help to operationalise these guidelines. In this way the project can provide the international community with examples of how the guidelines can be interpreted and also help to disseminate examples of good practice of the ways in which evaluation organisations can function.

EVA – Evalueringsinstitutet (Denmark).

Finheec – The Finnish Higher Education Evaluation Council (Finland).

NOKUT – Nasjonal organ for kvalitet i utdanningen (Norway).

NOQA – Nordic Quality Assurance.

Concluding reflections

The evaluations undertaken in 2005 confirm many of the observations made since the evaluations of subjects and programmes began in 2001. This section will focus on some of them in particular.

Teachers' working conditions, educational breadth and academic freedom

The Swedish National Agency for Higher Education has drawn attention in previous reports to the working conditions of academic teaching staff. This includes the question of the increasing amount of time they are required to devote to teaching more and more students in larger groups. Many also have to spend more time applying for external research funding as there is not enough direct funding to permit a reasonable proportion of research within their posts. In terms of international comparisons this proportion is disturbingly low. This affects both academic freedom and also the possibility of incorporating into the teaching features that will extend their students' horizons, what can be referred to as educational breadth or 'bildung'. It is necessary to place more stress on breadth and academic freedom in all educational programmes. In coming evaluations and surveys, the Agency intends to continue to highlight these aspects.

Internationalisation

For many years higher education in Sweden has been influenced by the Bologna Process and certain aspects of it, such as the Diploma Supplement, were introduced relatively early in Sweden. Now Sweden is introducing a new degree system that is based on the three-cycle division advocated by the Bologna Process. A new degree ordinance has been drawn up in which the objectives have been expressed in terms of expected student outcomes. This involves a great deal of work for the higher education institutions, but will also make it easier to compare programmes in Sweden and the other European countries.

Comparisons of this kind have of course been made in various ways for many years. A large number of assessors from other countries participate in the Swedish National Agency for Higher Education's evaluations and many more have experience of education and research abroad. The evaluations reveal that there are positive as well as negative differences in both structure and contents and in quality. Higher education in Sweden must have the ambition of attaining first class international standards. For this reason international comparisons should continually be made at both subject and institutional level.

This year's evaluations indicate that the participation of Swedish students in exchange programmes is low and in some cases seems to be declining. The number of outgoing students should increase and it is important to remove the obstacles that prevent this.

Higher education and the labour market

In a number of reports the Swedish National Agency for Higher Education has been able to determine that knowledge about the relationship between higher education and the labour market is inadequate. There are often few contacts between the higher education institutions and the labour market as well as little knowledge about how alumni fare in the labour market. If higher education is to be able to respond to the demands and needs of students and the labour market, exploratory studies, awareness and information will be needed.

The Swedish National Agency for Higher Education provides information of this kind within a special programme dealing with higher education and the labour market. The Agency would also like to emphasise the importance of monitoring alumni systematically at institutional level. This kind of follow-up provides the higher education institutions with important information about the extent to which a programme is adapted to labour market needs as well as information for potential students and those already enrolled about what programmes can lead to. As has been mentioned, the board of the Agency has proposed to the government that follow-up studies of this kind should be included in the directives given to the higher education institutions.

A national policy for languages

The Swedish National Agency for Higher Education has now evaluated all the programmes in modern languages and once again received confirmation of how problematic the situation is for all languages except English and the Nordic languages. Most of these subjects can be characterised as "small languages", i.e. subjects with very few students, few teachers and inadequate funding. The Agency has raised questions about the quality of several of these programmes and the higher education institutions have in a number of cases closed them down. Closures of this kind have even affected languages included by the government in the special commitments assigned to some higher education institutions.

On a number of occasions the Swedish National Agency for Higher Education has drawn the government's attention to the necessity of drawing up a national policy for languages. It is therefore gratifying that the government has now produced a new proposal concerning the special commitments, but the Agency would like once again to stress the importance of actually establishing a national policy for languages.

Future evaluations

The current round of evaluations will come to an end in 2006. From 2007 and onwards a new evaluation system will be introduced. The main features of this new system were presented in last year's *How Did Things Turn Out?*

The process of planning the new programme in greater detail started during the autumn of 2005. This involves, for instance, laying down new six-year plans for evaluating subjects and programmes and also for auditing the quality assurance procedures of the higher education institutions. An important element in this process is determining which aspects are to be appraised and drawing up criteria on which to base appraisals. Aspects and criteria for reviewing entitlement to award master's degrees in engineering, for instance, and various master's degrees must also be formulated, as must aspects and criteria for the determining centres of educational excellence.

In the new system greater weight will be given to thematic studies which aim to acquire in-depth knowledge about different circumstances and phenomena that are significant for the quality of higher education. Two studies of this kind have already begun as a result of the evaluation of teacher-training programmes. One of them will compare forms of examination in teacher-training programmes with the types of examination used in other programmes. The other study is organised in a similar way but will compare the standards of different degree projects. A third more general study, which is not a direct outcome of the teacher-training evaluation, deals with the ways in which the required links with research are actually incorporated into various programmes at different higher education institutions. The results of all three studies will be presented during 2006.

To provide support for the Swedish National Agency for Higher Education's evaluation work, a new Advisory Board has been appointed. This new Board will be officially constituted during 2006 and will replace the previous board, which finished its work during 2005.

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