The Internationalisation of Higher Education: The Nordic Experience

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Janne Carlsson
Former Rector, KTH Royal Institute of Technology, Stockholm

Hans Peter Jensen
Former Rector, Technical University of Denmark

Per Nyborg
Former Secretary General, Norwegian Council of Universities and Nordic Association of Universities

Páll Skulason
Former Rector, University of Iceland

Paavo Uronen
Former Rector, Helsinki University of Technology
Executive Summary:

The Nordic co-operation between Denmark, Finland, Iceland, Norway and Sweden is based on close cultural, linguistic, economic and political ties. Social cohesion was a leading principle in the rebuilding and development of the individual countries after the Second World War and also in the development of the Nordic co-operation. This also influenced higher education, with rapidly expanding systems with colleges and polytechnics supplementing the traditional universities in the Nordic countries. Higher education should be available for all – a social dimension long before the Bologna Declaration. Hence no tuition fees and generous student support systems – also for international studies. Nordic students were admitted at Nordic universities more or less on equal terms as national students, Nordic exams and degrees were recognised long before the 1997 Lisbon Recognition Convention.

With the 1999 Bologna Declaration, the Nordic co-operation in higher education fitted nicely into a wider European co-operation. The Bologna Process also led to a common three-cycle degree structure in the Nordic countries and quality assurance systems were developed according to commonly agreed standards and guidelines. The schemes for Nordic student mobility were supplemented the EU mobility programmes, in which also the non-EU countries of Iceland and Norway are participating. Nordic students have always been outgoing; now an increasing number of incoming exchange students and full degree students are studying at Nordic higher education institutions.

As the Bologna Process is going global – closely linked to the EU Lisbon Strategy – Nordic governments and Nordic higher education systems and institutions also have to develop a strategy for meeting the challenges of a global market for higher education. Denmark has taken a very clear stand, aiming to market Danish higher education globally and actively recruiting international students (at least some of them) for jobs in the Danish industry after graduation. Non-EEA students now have to pay substantial tuition fees at Danish universities – this is the law of the market. Finland and Sweden may follow Denmark’s example but Norway insists on providing free higher education to qualified international students, no strings attached. Iceland is very small on the global scale and also very far from the market. Clearly there exists no common Nordic strategy for meeting the challenges of the global market for higher education.

This report gives a detailed picture of the development of student mobility between the Nordic countries, between these countries and the rest of Europe, and between the Nordic countries and other regions in the world. The authors underline the importance of studying student exchange separately from full degree studies in another country, the latter being closely connected to recruitment of skilled personnel. The article also touches on the challenges of staff mobility, with regards to the two components of traditional academic mobility and job migration. With new initiatives by the EU Commission, job migration of researchers and higher education teachers may increase rapidly – hopefully new statistics will also be developed for better assessment of the international staff in our higher education institutions.
The Internationalisation of Higher Education: 
The Nordic Experience

Introduction

The Nordic Dimension

The Nordic co-operation between Denmark, Finland, Iceland, Norway and Sweden is based on close cultural, linguistic, economic and political ties. These ties are reflected in a number of formal and informal co-operation schemes. In the university sector, informal networks have existed for a long time, resulting in the exchange of students and scientists and joint publications. On the formal side, parliamentarians co-operate in the Nordic Council, and national governments co-operate in the Nordic Council of Ministers. In the university sector, the Nordic Association of Universities was established in 1995, to link the national university networks and to establish a joint contact to the Nordic co-operation schemes set up by the ministers. In many respects, the Nordic countries have acted as a single unit: “Norden”.

However, the growing strength of the European Union (EU) and the European Economic Area (EEA), which includes Iceland and Norway, makes Norden somewhat of a ‘fading beauty’. For higher education, the Bologna Process is also shifting the focus from Norden to Europe both within governments and higher education institutions.

On a global scale, all Nordic countries are small entities, with a total population of 25 million. The growth of the student population culminated at the turn of the century. To meet the accelerating global challenges facing higher education, a common base and a common strategy might be an advantage. With one million available study places, Norden could accommodate many international students.

Table 1: Comparative Population and Student Numbers in Norden

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Denmark</td>
<td>5.5 million</td>
<td>157,000</td>
<td>229,000</td>
<td>210,000</td>
</tr>
<tr>
<td>Finland</td>
<td>5.3 million</td>
<td>197,000</td>
<td>309,000</td>
<td>228,000</td>
</tr>
<tr>
<td>Iceland</td>
<td>0.3 million</td>
<td>6,000</td>
<td>16,000</td>
<td>14,000</td>
</tr>
<tr>
<td>Norway</td>
<td>4.7 million</td>
<td>177,000</td>
<td>215,000</td>
<td>186,000</td>
</tr>
<tr>
<td>Sweden</td>
<td>9.2 million</td>
<td>235,000</td>
<td>423,000</td>
<td>303,000</td>
</tr>
<tr>
<td><strong>Norden</strong></td>
<td><strong>25 million</strong></td>
<td><strong>772,000</strong></td>
<td><strong>Approximately 1 Million</strong></td>
<td></td>
</tr>
</tbody>
</table>

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1 Student numbers are counted in different ways. The 2006 data used here are extracted from (full-time and part-time) and full-time equivalent statistics compiled by the Organisation for Economic Co-operation and Development (OECD). In Norway and Sweden students are counted differently by the Ministry of Education (registered students in the HE institutions). The 1995 data are from reference 2 below.
The Nordic Model

The basic ideas of the Nordic co-operation were far from market-oriented; social cohesion has been a leading principle. Nordic countries have succeeded in combining economic growth with social cohesion. Observers around the world have been amazed that the Nordic economies can prosper and grow in spite of high tax wedges and an egalitarian distribution of income.

A 2007 report on the Nordic Model\(^2\) gives reasons why it has worked in the past and discusses the challenges it will be subjected to in the future.

Present economic and social trends, including globalisation and demographic change, pose significant challenges to the model as we have known it. But the report sees globalisation primarily as an opportunity and not a threat. However, the continued trend of globalisation will put the Nordic model under pressure. There is a need to focus on the core tasks of the welfare state and to clarify the scope of the services that citizens are entitled to, including education, which has been seen as a central element in the combined striving for economic growth and social cohesion. The social dimension of higher education was introduced in Norden 50 years before its appearance in the Bologna Process: All qualified applicants should have the possibility for higher education, irrespective of socio-economic conditions. In each country a college sector was established in parallel with the traditional university sector. Gradually the difference between the two sectors is disappearing; colleges are being renamed polytechnics or university colleges, with some of them having been accredited as universities.

There are still no tuition fees for Nordic students in the state-owned majority of higher education institutions, and each country has a well-functioning student support system. It may perhaps not be realistic to share such privileges with an increasing number of future incoming international students.

Since the 1970s, co-operation in higher education has been stimulated and supported by the Nordic Council of Ministers, with agreements on admission and recognition of higher education in place long before Bologna. The arguments used for justifying the Nordic co-operation in higher education were non-economic, while newer internationalisation trends are at least to some extent driven by economic arguments.

Nordic Student Mobility

Free mobility of students between the Nordic countries has been in practice for decades, for a long time without formal agreements. As particular fields of study became popular during particular periods of time, pragmatic regulations were introduced: Quotas could be introduced for Nordic students in individual countries. Admission to some studies (such as medicine and veterinary medicine) might be limited or reserved for nationals only. Norway for example, was ‘buying’ study places for airplane engineers (aeronautics) in Sweden, and extra capacity for business administration for a few years in Denmark. On the other hand, Norway used to reserve study places for Icelandic students in forestry, fisheries and other special fields, free of charge.

At the same time, most Nordic countries were supporting national students in countries outside Norden. A 1996 paper\(^3\) described Nordic student mobility before the Bologna Process and the Lisbon Strategy:


Iceland sent a large proportion of its students abroad. With a small population and only one university, students went abroad for graduate studies in most disciplines. Universities in the United States were popular, but also universities in Scandinavia served Icelanders well.

Norwegian students were heavy users of Danish and Swedish universities, but in the 1990s they also went in great numbers to Great Britain and the United States. However, the student flow across the Atlantic culminated, and high tuition fees for third countries' students in UK universities forced Norwegian students to look for alternatives. Australia soon became one.

Finnish students went to Sweden, the next-door neighbour. Whereas most Finnish students would be able to understand Swedish, few Swedes would understand the Finnish language, consequently the student flow was mostly one-way.

A sharp increase in the number of Swedish students going abroad reflected a marked change in Swedish policy around 1990. As in Norway, loans and grants for studies abroad were seen as an instrument for extending the possibilities for higher education, to benefit the country as well as the individual students. The United States were by far the most popular place to go.

More than its Nordic neighbours, Denmark has relied on its own capacity in higher education. As late as in the early eighties, only a few hundred Danes were studying abroad. One obvious explanation was the previous lack of support for studies abroad when similar studies were offered in Denmark.

Given that Denmark was the only EU member until 1995, the Erasmus programme at first contributed only marginally to the student exchange between the Nordic countries. In 1988, the Nordplus programme was introduced as a Nordic parallel to Erasmus. It introduced a new flow of exchange students in addition to the traditional free movers who used to stay abroad until they had obtained their degree.

The Nordic co-operation in higher education culminated with the 1994 Agreement on Admission to Higher Education, between the five Nordic countries. The Nordic Council of Ministers then decided that there should be equal treatment in higher education for citizens of the various countries within the Nordic group. It was made clear that as far as opportunities in higher education were concerned, the Nordic countries should operate as a single unit.

However, as the Erasmus programme opened up for the EFTA (European Free Trade Agreement) countries and Finland and Sweden joined the EU, the Nordic dimension was gradually overshadowed by the European dimension. With the Bologna Process, European co-operation has very much influenced Nordic higher education systems. Together with other European countries we have been building a common framework to realise the idea that students and staff shall be able to move freely within the European Higher Education Area (EHEA), having full recognition of their qualifications. Each country has developed a three-cycle degree system, introduced a national quality assurance system co-operating in a Europe-wide network. The long-time Nordic mutual recognition of degrees and study periods has been broadened to a Europe-wide obligation through the 1997 Lisbon Recognition Convention.

Thus, 50 years of Nordic co-operation is incorporating European higher education collaboration, thereby transforming the education system in each country, now with a common structure, including for instance for the first time also a common degree system in the Nordic countries. This makes Nordic co-operation easier, but it also opens it up to a wider market.
Looking Towards the Future

The 2005 report “Rethinking Nordic Co-operation in Higher Education” sees Nordic co-operation in higher education as a successful, “regionalisation” form of the internationalisation of higher education – a subspace of the EHEA. The report points out however that recent developments both in Europe and more largely, have made it necessary to reconsider the way in which Nordic collaboration is organised and implemented.

Unlike institutions in other countries, Nordic higher education institutions, excepting Danish universities, cannot profit economically from attracting foreign students other than through the national public funding model. Therefore the “export” dimension is lacking in Nordic higher education co-operation; an “export” dimension that is explicitly part of the internationalisation policies with respect to higher education in countries such as the UK, the USA, Australia, and the Netherlands. Recently, it has also been introduced in Denmark. What will happen in the other Nordic countries?

What will be the consequences of the Lisbon Agenda, the enlargement of the EU, and other developments with respect to European higher education for the Nordic structures that were set up to support Nordic higher education co-operation? To meet the challenges of globalisation, these structures may be inadequate. A more fundamental question is whether the basic Nordic ideas of equality and social cohesion make the best platform for entering the global market in higher education.

In this paper we shall study the continued development of internationalisation of higher education in Denmark, Finland, Norway, Sweden and Iceland during the past 10-15 years, looking for a possible Nordic platform for higher education within a global setting.

There is no generally agreed understanding of the relation between the terms international and global. The term international refers to relations involving more than one state and the term internationalisation is used for processes leading to international activity, it may be international co-operation, international competition or international trade. (Examples include the Bologna Process and the Lisbon Strategy.) We shall use the term global for worldwide processes such as global pollution and global trade, which are not under international governance, and globalisation for their development (as defined by World Bank: “The growing integration of economies and societies around the world”). Peter Scott has remarked that for higher education the label global implies new kinds of relationships between continents, regions, states, higher education systems and even individual institutions which are increasingly seen as “market” relationships – and which need to be distinguished from “non-market” relationships based on more traditional links or aid and development agendas, for which the international label seems more appropriate.

It is our understanding that internationalisation is one way for nation states, higher education systems and institutions to meet global challenges.

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1 Policies and Strategies for Internationalisation of Higher Education
Denmark, Finland, Iceland, Norway & Sweden

1.1 Denmark

Denmark’s first university, the University of Copenhagen, was founded in 1479. It was not until 1829 that the next higher education institution came along, nowadays known as the Technical University of Denmark. Today there are eight universities in Denmark with the obligation of performing research and higher education. Recently a number of research institutions were merged with institutions in the university sector – the former Risoe National Laboratories for example, now an integral part of the Technical University. This university, like others, is now required to perform research, as well as advise ministries, governmental committees and other public institutions on issues related to research.

Since 2003 Danish universities have been self-governing institutions with executive boards – of which the majority of members is external to the institution – and a management hired by the board through an application procedure. However, the universities are still to a great extent financed by public money (approximately 80%). As public institutions they are under the jurisdiction of the Ministry of Science, Technology and Innovation.

The merger of government research institutes with universities has contributed to the rise of public debates about the conditions for university research in relationship to free basis research contra strategic research defined through political channels into the board and management of the universities. Academic freedom has its limitations in the new regime.

A high number of local professional schools have recently been merged into eight university colleges. The university colleges offer a wide range of professional Bachelor degree and diploma programmes which include the teacher-training programme and training programmes for the health and the social sectors. The university colleges are under the jurisdiction of the Ministry of Education.

In addition, there are 22 specialised institutions of various kinds under the Ministry of Cultural Affairs, such as conservatories, architect schools, design schools, librarian schools, etc., all of which offer higher education programmes three to five years long in duration.

Over the last two decades the number of students has increased to 115,000 students at the university level and 100,000 at the university college level. In institutions under the Ministry of Cultural Affairs there are presently 5,500 students. Generally it seems the number of students in higher education is levelling out, making Denmark still significantly short of its political goal of 50% young people participating in higher education.

1.1.1 Student Support

Whereas there is no tuition for Danish or EU students, since 2006 students from outside the EU have had to pay tuition in order to be registered as students at Danish higher education institutions. Tuition fees cost DKK 1,710 (approximately US$325 or €230) per European Credit Transfer System (ECTS)-point, corresponding to DKK 51,000 per semester (equivalent to US$9,630 or €6,850\(^6\)). For students who cannot afford expenses of this magnitude, a stipend system exists. The introduction of these fees combined with the relatively high living expenses in Denmark have had a negative influence on the number of non-EU students studying in Danish higher education institutions.

Danish students registered at a university or a university college and fulfilling the major part of the annual performance requirement (which is 60 ECTS-points) receive a public grant of

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\(^6\) Exchange rates for all local currencies current as of 30 June 2009. Exchange rates as listed on [www.xe.com](http://www.xe.com).
DKK 62,000 (US$11,710 or €8,325) with the possibility of complementing this grant with a yearly loan of DKK 34,000 (US$6,420 or €4,565) at a favourable interest rate. The grant may be given for a maximum of six years. The grant may also be given for studies abroad provided these studies can be credited to a Danish degree or a degree in a foreign country. If the student has income besides the public grant, a reduced grant is awarded if annual income exceeds DKK 70,000 (US$13,220 or €9,400).

1.1.2 Foreign Students in Denmark

Table 2 gives an overview of the origin and numbers of foreign degree students in Denmark and their distribution between different cycles.

**Table 2: International Full-Degree Students in Denmark by Origin and Cycle (2006/7)**

<table>
<thead>
<tr>
<th>Region</th>
<th>Short-Cycle</th>
<th>Medium-Cycle</th>
<th>Long-Cycle Bachelor</th>
<th>Long-Cycle Master</th>
<th>PhD</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nordic Countries</td>
<td>191</td>
<td>531</td>
<td>1,154</td>
<td>1,364</td>
<td>44</td>
<td>3,284</td>
</tr>
<tr>
<td>Other Europe</td>
<td>259</td>
<td>252</td>
<td>326</td>
<td>860</td>
<td>151</td>
<td>1,848</td>
</tr>
<tr>
<td>Asia</td>
<td>457</td>
<td>212</td>
<td>161</td>
<td>1,042</td>
<td>100</td>
<td>1,972</td>
</tr>
<tr>
<td>USA/Canada</td>
<td>5</td>
<td>9</td>
<td>20</td>
<td>103</td>
<td>16</td>
<td>153</td>
</tr>
<tr>
<td>Latin America</td>
<td>9</td>
<td>8</td>
<td>29</td>
<td>73</td>
<td>26</td>
<td>145</td>
</tr>
<tr>
<td>Africa</td>
<td>41</td>
<td>74</td>
<td>20</td>
<td>187</td>
<td>12</td>
<td>334</td>
</tr>
<tr>
<td>Australia/NZ</td>
<td>1</td>
<td>4</td>
<td>4</td>
<td>6</td>
<td>3</td>
<td>18</td>
</tr>
<tr>
<td>Other</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>963</strong></td>
<td><strong>1,090</strong></td>
<td><strong>1,714</strong></td>
<td><strong>3,637</strong></td>
<td><strong>353</strong></td>
<td><strong>7,757</strong></td>
</tr>
</tbody>
</table>

1.1.3 Internationalisation of Danish Higher Education

In 2006 a governmental committee chaired by the Prime Minister published a strategy for Denmark in the global economy: *Progress, Innovation and Cohesion*\(^8\). This strategy identifies two main challenges for Danish society: Denmark shall be a strong competitor on the global market but Denmark shall also continue to have a strong social coherence promoted through a welfare system. In the field of higher education, the strategy implies that:

- 50% of all young persons in Denmark should obtain a higher education degree;
- All Danes should be engaged in Lifelong Learning (LLL);
- All educational programmes should have a global perspective;
- New and attractive educational programmes shall be developed in natural sciences, technology and health;
- The Danish educational system shall accept diversity and accommodate as many different backgrounds as possible;
- Within higher education stipends for going abroad shall be introduced; and
- Higher education institutions shall be committed to formulate goals for internationalisation of their educational programmes.

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\(^7\) See [Cirius](#) for more information; for example, *Mobilitetsstatistik for de videregående uddannelser 2006/07* (2008), Copenhagen: August.

To boost the internationalisation process the Government established in 2007 The Council for Internationalisation of Danish Education. Its terms of reference include advisory objectives to:

- Expand the number of higher education programmes being offered in English;
- Ensure that Danish students at all levels acquire global and intercultural competences and skills combined with a global view;
- Make Danish education and Danish educational institutions attractive to foreign students and foreign teachers at all levels; and
- Aid Danish educational institutions to develop professional environments which can attract and withhold qualified manpower from abroad.

In its first year of existence the Council focused on a number of themes. For example, a study detailing the framework for teacher-training programmes indicated a number of difficulties in the internationalisation process for teachers’ education from traditional, economic and legislative points of view. This is perhaps not surprising, as teacher-training in Denmark as elsewhere has deep roots in national culture and language.

Under the Ministry of Science, Technology and Innovation there is also an agency for international education, Cirius.

1.1.4 Challenges for the Knowledge Policy

In 2008 the Danish Ministry for Science, Technology and Innovation published a report on Challenges for the Knowledge Policy. It was prepared by a think tank analysing Denmark’s challenges for the immediate future. The main message of this report was as follows:

For Denmark to be in the world class in all main areas of research is a myth, which we ought to make up with as soon as possible. As knowledge society Denmark can only be in the world league in a few areas, but for most of the areas the elite is found outside this country.

This (true) statement led the think tank to conclude that while Denmark will undoubtedly develop strong research areas, for those areas where the elite is outside Denmark we can only acquire the necessary knowledge for development of our society by sending students, researchers and teachers out and at the same time attracting competent students, researchers and teachers from abroad.

As a follow up to this The Danish Council for Research Policy recently proposed that the number of foreign PhD students in Denmark should be raised from the present 7% to 20% in a planned process of increasing the total number of PhD students in Denmark considerably.

Directed towards the internationalisation of education and research in Denmark the report contained a number of proposals to:

- Ensure that teacher and students are so proficient in English that the qualities of the educational programmes do not drop;

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9 See Cirius. An English summary of the Danish-language report Mobility Statistics for Higher Education 2006/07 is available on the website.
• Expand the amount of flexible stipends and tuition waivers in order to attract talented students from abroad to Denmark;
• Stimulate talented students from abroad to stay in Denmark after graduation;
• Increase the marketing of Danish Educational programmes abroad;
• Remove the legislative barriers for the possibility of offering Danish educational programmes abroad and for entering into international educational alliances;
• Speed up the processing of foreign student visa applications;
• Support the universities in their recruitment of international PhD students;
• Reduce drop-out rates at Danish higher education institutions;
• Develop attractive study environments for students; and
• Encourage higher education institutions to develop educational content which focuses on social good and innovation by using case-based learning.

1.1.5 Case Study: The Danish University Centre in Beijing

Danish Universities and the Danish Ministry for Science, Technology and Innovation published in September 2008 the decision to establish a Danish University Centre in Beijing in partnership with the Graduate University of Chinese Academy of Science (GUCAS). The new centre shall:
• Create visibility in China for Danish research and higher education;
• Intensify Danish-Chinese co-operation within research;
• Develop common Master’s and PhD educational programmes;
• Co-operate in research and higher education with Danish and Chinese companies;
• Improve the Chinese study opportunities available to Danish students; and
• Increase the recruitment of ‘excellent’ Chinese researchers and students to Denmark.

The Danish University Centre will establish a framework for the development of Danish-Chinese research projects and PhD programmes, as well as joint degree Master’s programmes (awarded both by a Danish University and GUCAS). The centre shall furthermore enter into close co-operation with Danish companies in China via in-service training and further education, internships and development projects. The intention is to coordinate the efforts of Danish universities in order to combine points of strengths and to create critical mass through collaboration.

The centre will be developed over a five year period (2009-2013). By 2013 the centre aims to have a staff of 100 researchers, 75 PhD students and 300 Master’s students, half of them coming from Denmark and half from China. The Danish contribution to the centre will primarily involve staff (visiting professors and postdoctoral candidates) contracted to work there for one to three years.

The Danish University Centre will be located on GUCAS’ new campus 60 km outside the centre of Beijing. This campus will be able to accommodate 11,000 students when it starts operations in 2011.

The yearly running costs are estimate to be 100 million DKK (US$18.9 million or €13.4 million) when the centre is fully established. Denmark will be responsible for financing half of these expenses which again is going to be split between the institutions and the Ministry. In addition, the Danish business community is expected to contribute through stipends, business related education, internships, etc.

The success of this investment is closely related to the possibilities of building up viable research environments where researchers from Denmark and China may achieve something special through co-operation, focusing on five to six research areas chosen in close dialogue between the partners.
1.2 Finland

In 1640, a Swedish university was founded in Finland as the Royal Academy of Turku. When Finland became a Grand Duchy of Russia in 1809, it was renamed the Imperial Academy of Turku. In 1828 it was transferred to Helsinki and renamed the Imperial Alexander University in Finland. After Finland’s independence from Russia in 1917, the name was changed again, this time to the University of Helsinki.

Today Finland has 20 universities and 26 university colleges (polytechnics). Given that restructuring is ongoing, the country’s number of institutions is likely to be lower in the near future, as several alliances or mergers are already at the planning stage. Six university centres additionally focus mainly on continuing education and local research. Statistical data on universities and fields of education may be found in the KOTA database maintained by the Ministry of Education.

All universities in Finland are state institutions, but a new university act will change their situation in this context; for example, universities will exercise more autonomy in economic relations to the state and at least two of them will be foundation universities.

Budgeting of the Finnish universities is mainly result-based, with the number of degrees (MSc and PhD), contract research, scientific activities and societal co-operation the most important factors affecting the money coming directly from the state budget. In addition universities receive research funding from the Academy of Finland, several foundations, the EU and from industry. On average the direct budget funding covers 64% of the total spending of universities.

Conversely, polytechnics are owned by communities or are privately owned. The financing of polytechnics is also mainly based on state funding but is directly related to the number of students. Communities and private owners give financial support to polytechnics, which may also get some contract research money. The communities cover around 50% of the total funding of polytechnics.

As of yet, tuition fees are not applicable in the Finnish higher education system, including for foreign students. It is now being discussed if non-EU/EEA students should pay tuition fees ranging from €1,000–€3,000 (US$1,405–US$4,220) per academic year. Tuition fees may also be required for continuing education or contracted special courses (even for Finnish students).

Finland’s strategy is to invest in education, research and innovation. The network of universities and polytechnics covers the whole country, and the target is that more than 50% of each age cohort shall receive higher education (at the university or polytechnic level).

The target of the Finnish higher education is to give to students the skills to work in an international and multicultural working environment. The international contacts and mobility of students and staff improve also the quality of teaching and research. The universities and polytechnics offer high quality education and research in their own strong specialities in foreign languages and benefit from international co-operation and networks.

Finland will in the near future suffer from lack of professionals in the job market. Globalisation is demanding Finns to learn more foreign languages and to understand foreign cultures in order to be able to work in the global economy and international business.

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11 The KOTA database is accessible via the Ministry of Education’s website.
12 Government of Finland (2009) Finnish Universities Act Reform, as presented to Parliament on 20 February; an English version of the proposal is available here.
Therefore the national strategy has two main points:

- to increase the mobility of the Finnish students; and
- to attract more foreign students to come to Finland for their education, and stay as highly qualified members of the work force after it.

Together with the other Nordic countries, Finland signed the Bologna declaration 1999 and immediately started preparations to put it into practice. All universities now follow the Bologna degree system (BSc and MSc).

Finland has three official languages: Finnish, Swedish and Lappish (Sami). Most universities and polytechnics give their education in Finnish but there are Swedish language universities (Åbo Akademi and Hanken School of Economics, for example) and some Swedish language polytechnics. It is the right of each student to take the examinations in his or her mother language. More and more courses are now given also in the English language and a number of Master's programmes are fully offered in English in all universities.

### 1.2.1 Student Support

All Finnish students receive a grant of €300 (approximately US$420) per month for a maximum of 55 months. Students abroad receive €440 (US$618) per month. Housing support amounting to approximately €200 (US$280) per month is given for a maximum of 55 months. Students may also get a loan guaranteed by the state and with a low interest rate.

Foreign citizens living in Finland are eligible to access the same benefits as Finnish students. Incoming foreign students however, do not get these benefits as it is assumed that they should be supported from their home country. That being the case, some special grants are available also for foreign students.

In order to enter the Finnish labour market, foreign students may after graduation have a one year staying permit to look for a job. If successful, they will normally get a permanent visa. This policy is quite new and it has relaxed foreign entry into the Finnish labour market.

### 1.2.2 A National Strategy for Education and Research

In 2007 the government of Finland presented a national strategy of education and research for the period 2007-2012. The priorities are to guarantee equal opportunities for education and training and the availability of skilled labour, to develop higher education and to safeguard competent teaching resources. Globalisation is seen as an opportunity to promote national and international wellbeing.

Universities and polytechnics will continue to be developed in keeping with the dual model, which is based on different degrees, degree titles and professional tasks. A large scale university reform has been launched and because the structures will be changed, reform is set to increase the financial and administrative autonomy of universities. The aim is to increase ‘top’ international expertise by establishing a stronger and more effective HE sector.

The government guarantees the financial and structural prerequisites for high-quality, multi-disciplinary basic and applied research and will bolster the innovation capacity of the nation.

In order to raise the level of education and training the country needs a competent teaching staff. Measures will be taken to ensure access to competent and knowledgeable teachers and the working conditions of the teachers at all levels will be improved.

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Changes in the operating environment pose many challenges to higher education institutions. To enhance the quality and impact of HE, national and international strategic alliances between HE institutions will be supported. The degree of alliance varies from institutional mergers to closer co-operation on teaching, research, support services and the use of material and equipment.

By 2012 each university and polytechnic shall have a distinct profile in terms of teaching, research, links with industry and regional development. The profiles of universities and polytechnics will be sharpened in target and performance negotiations in order to bring strategic priorities into clear relief, which will facilitate the targeting of research funding and competition in international funding. Universities’ research prerequisites will be strengthened in the selected priority areas and especially in research-intensive universities. The new Aalto University is an example of these reforms; it is a merger of Helsinki University of Technology, Helsinki School of Economics and the University of Art and Design.

The 2009 university act will provide the universities with larger financial and administrative autonomy. Universities will be empowered to have assets outside the state budget. Donations to scientific research will be made tax deductible on a broad basis. In order to provide more incentive, the financing of polytechnics will be developed to take more account of the degree targets, the number of degrees awarded and the quality of education. The Ministry of Education will reform the HE steering system focusing in quality and impact of education and research.

1.2.3 Internationalisation

Internationalisation of higher education and international research co-operation are both seen as key factors for success in global competition. For the HE sector student, teacher and researcher mobility, international research and development projects and the establishment of joint and double qualifications are top priorities.

Finland is an attractive destination for student exchange and the target is to further increase the share of foreign students and personnel. Special investment will be made to expand the recruitment base for research training.

HE institutions will enhance co-operation to develop the export of competence with their areas of expertise. Tuition fees may be introduced for students coming from outside the EU and EEA in international second-cycle study programmes leading to a higher education degree. A scholarship system will be introduced for foreign students of limited means. Students and staff in Finnish HE institutions must be provided with sufficient linguistic skills for international co-operation in studies and working life. Teachers must have sufficient linguistic skills for continuous teaching in a foreign language.

Foreign students coming to Finland must be provided with a sufficient amount of Finnish and Swedish studies to enable them to enter the Finnish labour market.

In January 2009 the Government of Finland published the new strategy for internationalisation of higher education for the period 2009-2015. Its main points cover:

- The development of an international educational environment;
- How to increase attractiveness and improve quality;
- The export of knowledge;

15 See the Study in Finland website for further information.
• Ways to support a multicultural society; and
• Global responsibility.

1.2.4 Case Study: Mobility Targets

The international mobility of students, teachers and researchers shall increase. Whereas most countries have a general, but unspecified goal to increase mobility, targets set in the Finnish strategy paper are very specific (see below).

Table 3: Mobility Targets – Finland

<table>
<thead>
<tr>
<th></th>
<th>2007</th>
<th>2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>Foreign degree students</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Incoming</td>
<td>11,303</td>
<td>20,000</td>
</tr>
<tr>
<td>outgoing</td>
<td>3.7%</td>
<td>7%</td>
</tr>
<tr>
<td>Foreign doctoral students</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Incoming</td>
<td>1,689</td>
<td>3,000</td>
</tr>
<tr>
<td>outgoing</td>
<td>26.2%</td>
<td>47%</td>
</tr>
<tr>
<td>Mobility of staff in polytechnics</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Incoming</td>
<td>3,252</td>
<td>4,000</td>
</tr>
<tr>
<td>outgoing</td>
<td>50.4%</td>
<td>62%</td>
</tr>
<tr>
<td>Mobility of staff in universities</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Incoming</td>
<td>1,733</td>
<td>4,000</td>
</tr>
<tr>
<td>outgoing</td>
<td>12.7%</td>
<td>29%</td>
</tr>
<tr>
<td>Mobility of students in polytechnics</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Incoming</td>
<td>4,418</td>
<td>8,000</td>
</tr>
<tr>
<td>outgoing</td>
<td>3.7%</td>
<td>8%</td>
</tr>
<tr>
<td>Mobility of students in universities</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Incoming</td>
<td>7,178</td>
<td>8,000</td>
</tr>
<tr>
<td>outgoing</td>
<td>6.1%</td>
<td>8%</td>
</tr>
</tbody>
</table>

1.2.5 Strategy Elements

Among 33 recommendations and proposals of the strategy paper are the following:
• The Ministry of Education will start a special funding project for mobility;
• HE institutions shall include internationalisation in their degree programmes;
• HE institutions shall improve the guidance and support of the foreign students;
• Linguistic skills and knowledge of foreign cultures among HE teachers will be improved;
• HE institutions shall improve their co-operation nationally and internationally;
• The number of foreign scientists in strategic important areas must be secured;
• The recruitment of foreign students will be enhanced;
• The Ministry will install a committee to prepare for the export of educational services;
• HE institutions must increase and improve the teaching of national culture and languages to foreign students and researchers;
• The financial aid system will be developed so that it covers also foreign students;
• The Ministry and HE institutions in co-operation with the industry will develop a suitable training model in order to help foreigners to integrate into our labour life;
• Recognition of foreign degrees must be developed and harmonised;
• Increased information on the educational possibilities in Finland to immigrants;
• Residence permits for seeking a job should be lengthened;
• In order to meet the targets of UN sustainable development 2005-2014 HE institutions must increase their national and international networking;
• The North-South-South programme will be enlarged and its funding increased;
• HE institutions may participate in state development programmes; and
• The Finnish Evaluation Council will in 2010 make an evaluation on all international programmes in the HE sector.
1.3 Iceland

The modern Icelandic system of higher education dates back to the foundation of the University of Iceland in 1911. The University of Iceland remains the principal institution of higher learning in Iceland, but over the last three decades new institutions with a more specialised focus have emerged, increasing diversity at the higher education level.

Higher education institutions in Iceland operate within the framework of the 2006 Universities Act. In this Act, the Icelandic term “háskóli” is used to refer to traditional universities, as well as institutions which do not carry out research. The Act thus does not make a distinction between universities and other institutions providing higher education. This framework act applies to educational institutions providing higher education leading to a degree and which have been accredited by the Ministry of Education, Science and Culture, according to rules on accreditation. Each higher education Institution is accredited in a particular field of study and subdivisions therein. The Ministry has also issued a National Qualification Framework for Iceland, describing the structure of education and degrees at higher education that is specifically based on learning outcomes. All accredited higher education institutes in Iceland shall follow this framework.

Currently there are seven institutions categorised as “háskóli” in Iceland. Three of these are private, but are run with state support. The University of Iceland is the largest institution, with five schools and 25 faculties, now having study programmes at the Bachelor’s, Master’s and PhD levels. The other institutions differ greatly in the extent to which they engage in research and the number of programmes offered.

The principal language of instruction is Icelandic, a language descended from Old Norse and, in its written form at least, still very similar to it. Textbooks are mainly in English and Icelandic. Most faculties offer courses in English and some departments allow international students to take their examinations in English during the first semester of study. This is, however, always subject to the approval of each faculty and individual instructors.

1.3.1 Student Support

There are no tuition fees at state-run Icelandic institutions of higher education – only registration fees. Privately run higher education institutions charge tuition fees.

Icelandic students attending institutions of higher education are eligible for student loans from the Icelandic Student Loan Fund. The total loan received per annum depends upon the income of the student and his/her spouse, as appropriate. The rate of student support increases with respect to dependent children aged 18 or younger. Repayments commence two years after the completion or discontinuation of studies.

In accordance with the EEA Agreement, individuals from the EU member states and EFTA countries who have worked at their trade or profession in Iceland for at least one year are entitled to apply for a loan. Students from the Nordic countries, who are permanent residents in Iceland and are registered at an Icelandic institution of higher education, are also eligible for student loans if they are not supported financially by their own country. The Icelandic Student Loan Fund may grant loans to other foreign students if Icelandic students have comparable rights in the home countries of those students.

The Ministry of Education, Science and Culture annually offers a limited number of scholarships to foreign students to pursue studies in Icelandic language and literature at the University of Iceland.

Grants are available for postgraduate, research-oriented studies at universities in Iceland.
The grants are awarded on the basis of a research proposal submitted jointly by a student and professor. The respective university faculty must also approve the research proposal.

1.3.2 Student Mobility

For the year 2007 Statistics Iceland reported that 17,708 students were engaged in higher education, 2,341 of which were supported by loans from the Icelandic Student Loan Fund for studies abroad. Almost one half (48%) were studying in Denmark. The second largest number of students abroad is found in the USA (13%), and thereafter in the UK (10%). Icelandic students go far and wide. In the autumn term of 2006 they were studying in 34 countries. Statistics from other countries show that Icelandic students abroad are underestimated in these figures. This is most evident for Icelandic students studying in the Nordic countries.

Iceland has been actively participating in the EU student exchange programmes. An initial phase in the early 1990s saw a rapid growth of outgoing students while the number of incoming students remained quite moderate. In a second phase, during second half of the 1990s, there was a continued growth of outgoing students but also a large increase in the number of incoming students. Then, in the period 2000-2006 the number of outgoing students seems to have stabilised while the number of incoming students keeps growing. The status of Iceland has therefore changed from being primarily a "sending" participant to a "receiving" one. The most active Icelandic higher education institutions are currently in the position of having to be selective of partner institutions to try to maintain a balance in the student exchange.

1.4 Norway

Norway's first university - the University of Oslo - was founded in 1811, three years before the country's independence from Denmark. As late as in the mid-1950s, there were not more than 6,000 students in the country. Following 40 years of expansion however, reflecting the population's increasing social and cultural expectations, Norway's student population reached 200,000 by end of the 20th-century.

The country now has seven universities and an additional five institutions at the university level plus 27 university colleges under state ownership. In addition there are a number of private HE institutions, of which 25 receive state support for a number of educational programmes. 12% of the total number of students now study in private institutions. The Database for Statistics on Higher Education (DBH)\(^{16}\) contains data on universities, specialised university colleges and academies of arts.

The democratisation of access changed Norwegian higher education from education for a small group to mass education. Any person living in the country should have equal access to higher education irrespective of gender, religion, geographical or socioeconomic background. There were no tuition fees. Establishment of the State Loan Fund for Education and the introduction of grants and interest-free loans to cover living expenses was an essential factor in the realisation of the social dimension of higher education in Norway. This was done at a time when Norway was still considered to be a poor country. For a large part of the last century, the country had to import more than it managed to sell and was constantly borrowing money in order to cover the deficit. The change has been spectacular, largely due to the fact that Norway produces and sells vast quantities of oil and gas to other countries. Production of light metals, aquaculture and international shipping also contributes significantly to the national economy. The 2008 global financial crisis has hit hard, but the country has large economic reserves. Funds made available for renovating and expanding higher education

\(^{16}\) For more information, see the DBH. (Note: text is in Norwegian.)
infrastructure will help keep building the industry and an increase in the number of study
places will ease the strains on the labour market.

1.4.1 A Development of Higher Education linked to Internationalisation

Education abroad has been an element in the Norwegian higher education system since the
1950s. Grants were given for tuition, living expenses and travel to Norwegian students
studying for a degree at universities in Western Europe or North America. At the outset, this
was done due to lack of capacity in Norway, but later on to provide Norwegian society with a
broader knowledge basis. In the mid-1980s, the government introduced a strategy for the
internationalisation of Norwegian industries which included a higher education component to
support Norwegian students graduating in engineering and business administration at
internationally high-ranking universities. In the 1990s the support scheme for studies abroad
was widened to include studies in recognised universities anywhere in the world. (Australian
universities immediately became very popular.) The long existing support scheme for
students from developing countries was revised to encourage them to return home having
obtained their degree. With modifications, the various support schemes mentioned are still in
operation.

International student exchange was developing in the early 1990s with the Nordplus and
Socrates programmes. Later on, student mobility was given increased priority with the
Bologna Process, in which Norway became an active participant. Exchange for teaching
purposes also came with Nordplus and Socrates, but with the Bologna Process, there has
also been increased attention on the exchange of higher education staff.

Prior to the 1999 Bologna Ministerial Conference, internationalisation mainly meant mobility
of students and staff. The follow-up of Bologna started what has been known as the “Quality
Reform” of Norwegian higher education. The objectives of the resulting Norwegian policy
(defined in a 2001 White Paper to Stortinget, the Norwegian Parliament) make it clear that
higher education in Norway – as a good example of the Nordic model – is a public
responsibility and a central element in national politics, and that HE institutions are partners
in the realisation of national goals to:

- Offer everybody the possibility for personal development;
- Take care of and further develop our common competence and culture;
- Strengthen democracy and contribute to a critical dialogue;
- Educate candidates for industry, the social sector, education and research;
- Contribute to the building of social structures and solidarity;
- Strengthen co-operation with the international community;
- Develop new knowledge and new answers in the various sectors of society;
- Develop equity between men and women; and
- Contribute to regional development and regional policies.

A new Law (2005) on Higher Education (state and private) gave HE institutions the autonomy
they had asked for, as well as more responsibility and accountability. The individual institution
now decides on its goals and strategies, appoints its professors, admits its students, decides
its study programmes, and is responsible for the quality of its programmes. It receives a lump
sum budget from the Ministry of Education and Research in addition to income from contracts
with state agencies and private industry. For the universities, the income from contracts is
around 75% of the total budget; for the state colleges it is around 10%.

Internationalisation has been seen as a central element in the Quality Reform; co-operation
and exchange of students and staff is believed to be a central element in quality
improvement. In accordance with Bologna, Bachelor’s and Master’s degrees have been
introduced. A national grading system with A, B, C, D, E for passed and F for failed and the
use of a Diploma Supplement are prescribed by the law. A credit accumulation system is in operation. The Norwegian Centre for International Co-operation in Higher Education (SIU)\footnote{See the \textit{Norwegian Centre for International Co-operation in Higher Education.}} has got a wider mandate as a public agency to promote international co-operation in education.

A large number of new study programmes have been introduced at the Bachelor's and Master's level, in universities and university colleges. An increasing number of courses and programmes are given in English, especially at the Master's level. Today, some 800 courses and more than 40 Master's degree programmes are available in English at the University of Oslo.

Learning outcomes are gradually receiving more attention than input. There has been an important expansion in research training at PhD level (third cycle).

International students are welcome\footnote{For information about studying in Norway, see the Study in Norway website.} and they study for free at state institutions. Although there is a shortage of qualified workers and professionals in Norway, international students are expected to return home after graduation. Especially in relation to developing countries, the argument has been to minimise brain-drain.

Initiatives to facilitate the transition to work after completing an education in Norway are being considered, as a follow up of a 2008 White Paper on labour migration. A work permit for skilled persons may lead to a permit for permanent residence. A new Immigration Act, effective from 2010, is expected to further ease immigration for highly skilled personnel.

A White Paper on the continuing internationalisation of Norwegian higher education presented to \textit{Stortinget} in February 2009 does not propose any major changes in policy. Norway will continue its present practice of welcoming foreign citizens to come to Norway and study for free at state higher education institutions. The document has no reference to Norwegian immigration rules and the possibility for obtaining a residence permit and work permit after graduation. However, the discussion that followed in \textit{Stortinget} in April 2009 underlined the importance of free higher education for recruiting foreign experts to Norway.

Until now, international trade in higher education has not been a topic in the national debate, even though Norway through its student support schemes is a big importer of educational services. The new White Paper proposes that the support schemes for Norwegian students abroad should be adjusted, giving preference to studies at high quality institutions. How this should be done, is open to debate. Further increase in all forms of mobility is seen as positive, but it is not clear to what extent state institutions should actively market their free education abroad.

At the present time, international students account for 6% of the total number of students in Norway. The number of students abroad corresponds to 9% of the total number of Norwegian students.

1.4.2 Student Support

Establishment of the Norwegian State Loan Fund for Education in 1947 and the introduction of grants and interest-free loans to cover living expenses was an essential factor in the realisation of the social dimension of higher education in Norway. In the first year, a total of NOK 3.3 million (US$0.51 million or €0.37 million) was allocated to 2,200 students. In the late 1950s, support was extended to pupils in upper secondary education. Means testing of the parents’ economy was disbanded in the early 1970s. The system of grants and loans was further developed and differentiated in the 1980s and 1990s.
For the academic year 2008/09, basic support to Norwegian students in first and second cycles is NOK 85,000 (approximately US$13,230 or €10,000). The support is initially given as a loan however, 40% of which may be converted to a grant after graduation. There are special arrangements for maternity leave, illness and students with children. PhD-work in Norway (third cycle) is carried out in a salaried position.

1.4.3 Norwegian Students Abroad

The Norwegian government is also providing generous support to Norwegian students abroad. Foreign educational institutions have to be recognised by the relevant authority in the country in question and the educational programme has to be at the Bachelor’s level or higher.

Historically, Norwegian students were heavy users of Danish and Swedish universities, but in the 1990s they also went in great numbers to Great Britain and the United States. However, the student flow across the Atlantic culminated and high tuition fees for third countries' students in British universities forced Norwegian students to look for alternatives. Australia soon became one. This development over time can be seen from Table 4.

Table 4: Norwegian Full-Time Students at Foreign Institutions

<table>
<thead>
<tr>
<th>Year</th>
<th>Denmark</th>
<th>Sweden</th>
<th>Australia</th>
<th>France</th>
<th>Germany</th>
<th>Hungary</th>
<th>Italy</th>
<th>Netherlands</th>
<th>Poland</th>
<th>Spain</th>
<th>UK</th>
<th>USA</th>
<th>Other</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1999/00</td>
<td>1,510</td>
<td>715</td>
<td>357</td>
<td>769</td>
<td>503</td>
<td>77</td>
<td>530</td>
<td>6066</td>
<td>4,101</td>
<td>1,820</td>
<td>966</td>
<td>13,695</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1998/9</td>
<td>1,496</td>
<td>832</td>
<td>1,009</td>
<td>344</td>
<td>800</td>
<td>77</td>
<td>437</td>
<td>245</td>
<td>57</td>
<td>4,063</td>
<td>1,967</td>
<td>841</td>
<td>12,576</td>
<td></td>
</tr>
<tr>
<td>1997/8</td>
<td>1,368</td>
<td>916</td>
<td>521</td>
<td>382</td>
<td>867</td>
<td>315</td>
<td>77</td>
<td>341</td>
<td>176</td>
<td>4,373</td>
<td>2,066</td>
<td>759</td>
<td>11,572</td>
<td></td>
</tr>
<tr>
<td>1996/7</td>
<td>1,099</td>
<td>983</td>
<td>245</td>
<td>395</td>
<td>958</td>
<td>254</td>
<td>80</td>
<td>252</td>
<td>112</td>
<td>3,318</td>
<td>2,019</td>
<td>651</td>
<td>10,410</td>
<td></td>
</tr>
<tr>
<td>1995/6</td>
<td>890</td>
<td>939</td>
<td>71</td>
<td>382</td>
<td>1,013</td>
<td>171</td>
<td>99</td>
<td>193</td>
<td>74</td>
<td>2,836</td>
<td>1,981</td>
<td>485</td>
<td>9,249</td>
<td></td>
</tr>
<tr>
<td>1994/5</td>
<td>633</td>
<td>843</td>
<td>40</td>
<td>348</td>
<td>1,046</td>
<td>77</td>
<td>94</td>
<td>159</td>
<td>30</td>
<td>2,425</td>
<td>2,037</td>
<td>485</td>
<td>8,249</td>
<td></td>
</tr>
</tbody>
</table>

1.4.4 Case Study: Why do Norwegian students go to Australia?

Students in countries outside Norden may receive support for all or part of the tuition fee. (No tuition fees for students from the Nordic countries.) For 2008/09, the maximum support is NOK 106,740 (US$ 16,635 or €12,500); partly grant, partly loan. In special cases, additional support may be given to cover even higher tuition fees. Support is granted for two

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19 For information about Norwegian students studying abroad, see the Norwegian State Loan Fund for Education’s website.
return trips per year between the student’s home town in Norway and the educational institution abroad – this support also partly grant, partly loan.

Australia fits these rules perfectly: Education is generally good, tuition fees and living expenses are reasonable, quality of life is high (swimming, surfing and sunning is much better than in Norway...). (Until 2004, it was even better, as support for tuition and travel was grants only. This had to be changed due to the great exodus to Australia reaching close to 4,000 students in 2003. It may be changed again after the 2009 White Paper.)

1.4.5 The Quota Scheme – Supporting Students from Developing Countries

The Norwegian government provides scholarships for students from developing countries as a contribution to the internationalisation of higher education. Presently, the scheme funds a total of 1,100 students. The goal of the “Quota Scheme” is to give the students relevant education that would also benefit their home countries when they return after graduation.

Each year universities and university colleges in Norway are allocated a certain number of study places for quota students. Most of the universities and university colleges in Norway offer courses and educational programmes in English. The scheme normally includes courses at the Master’s and PhD level, in addition to certain professional degrees.

The Norwegian State Educational Loan Fund is responsible for managing the financial support provided for the Quota students. Each student receives the same amount of money as a Norwegian student would do in an equivalent educational programme for up to four years. About 30% of the amount is given as a grant and 70% as a loan. However, the loan portion is waived when the student returns to his/her home country after completing the course of study.

Travelling expenses for entry into Norway will be reimbursed. Students can apply for one annual home visit if the educational programme lasts more than one year, as well as financial support for travelling expenses for field work during the course of study. When the student returns home within three months after finishing the course, the cost of travelling home is covered by the State Loan Fund.

1.5 Sweden

Sweden’s first university, Uppsala University, was founded in 1477. During its first one hundred years it was closed during long periods. Sweden’s second university opened 1668 in Lund. After that it took until the 1890s before Stockholm and Gothenburg – the two largest cities in Sweden – got university colleges, which later became universities. University colleges for professional education and training started in the beginning of the 19th-century in the areas of art, economy, engineering, medicine, agriculture and forestry. The large expansion of higher education occurred in the period from 1960 to 1980, when many regional university colleges and new universities were started. During this period many university reforms were realised to meet increasing numbers of students. A financing system for students was introduced in 1964 and made available to everyone who was registered at a university or university college. A reform in 1977 implied a detailed regulation of the universities and a direct dependence of the government. Through later reforms the universities have been given considerable independence and two private universities have been established through transformation of two already existing public ones.

Today Sweden has 18 public and three private universities, 11 university colleges and seven university colleges of art. Student numbers have continued to increase over the past two decades, growing from 140,000 in 1990 to 340,000 in 2008 (having since stabilised at that level). Of a cohort of young people, 44% have now begun to study at universities or university colleges at 25 years of age.
The Swedish National Agency for Higher Education (Högskoleverket - HSV)\textsuperscript{20} is a public authority that oversees higher education institutions in Sweden – it also has a comprehensive database\textsuperscript{21}.

As in all Nordic countries, gender has for a long time been an important issue at Swedish universities. Today there are more women than men in higher education - about 60% are women. Of all degrees 66% are taken by women. Men are in a majority only among the engineering sciences, both at the MSc and BSc-level.

1.5.1 Student Support

In Sweden there is no tuition for Swedish and foreign students, not even at private universities. It is being discussed lately to introduce tuition at cost price for students from outside the EU/EEC region and at the same time to compensate those students who cannot afford tuition by introducing a stipend system. This will be realised at the earliest in the academic year 2010/11.

Swedish students registered at a university or university college and fulfilling at least 70% of the annual performance requirement get a public grant of SEK 25,700 (approximately US$3,300 or €2,370) a year and are in addition offered a yearly loan of SEK 52,500 (US$7,000 or €4,835) at a favourable interest rate. The loan has to be paid off after finished studies at a low annual instalment rate. The grant and the loan are also available for Swedish students studying abroad. These students can also get loans to cover the cost of tuition. Grants and loans can be obtained during a period of at most six years. The government is now discussing decreasing this time to four years, except for programmes with a longer nominal study time. A student is allowed to earn SEK 107,000 (US$13,860 or €9,860) a year and still keep the whole loan and grant. Most of this support system was introduced already in 1964.

There is no general support system for foreign students. However, EU-citizens and citizens of Iceland, Norway and Switzerland may be supported if they:

- have a permanent residence permit; or
- have a residence permit and have been working in the country for at least two years; or
- are married or have been living with a Swedish citizen for at least two years.

Those having status as refugees are entitled to the support irrespective of country of origin under the same conditions as Swedish citizens.

There are stipends given by Swedish organisations e. g. by SAREC, which is part of the Swedish International Development Co-operation Agency, SIDA. These stipends are part of general support to universities in developing countries and mainly finance equipment, other infrastructure, etc. The total support of this kind is SEK 920 (US$120, €85) a year. No official statistics are available for the number of stipends, which varies from year to year.

1.5.2 Foreign Students in Sweden

Foreign students make up quite a large portion of the total number of students in Sweden - especially foreign male students. In the academic year 2006/07 foreign men were 10,600 out of a total of 35,400 men starting their education, i.e. 28%. Of a total of 46,000 women starting their studies 2006/07 those coming from abroad were 8,600, i.e. close to 19%.

\textsuperscript{20} See the HSV.
\textsuperscript{21} Student mobility statistics for example, are available in the database. (Note: text is in Swedish.)
The following groups are classified as foreign students in the Swedish statistics:

- those with a student residence permit;
- those who have obtained a temporary civic registration number from the university; or
- those who have immigrated less than six months before starting their studies.

As can be seen from Table 5, numbers have increased markedly over the last ten years.

Table 5: Foreign Students in Sweden

<table>
<thead>
<tr>
<th>Year</th>
<th>Total number</th>
<th>Exchange</th>
<th>Free movers</th>
</tr>
</thead>
<tbody>
<tr>
<td>98/99</td>
<td>10,472</td>
<td>5,304</td>
<td>51,68</td>
</tr>
<tr>
<td>99/00</td>
<td>11,565</td>
<td>6,034</td>
<td>52,44</td>
</tr>
<tr>
<td>00/01</td>
<td>12,064</td>
<td>6,533</td>
<td>55,31</td>
</tr>
<tr>
<td>01/02</td>
<td>14,077</td>
<td>7,215</td>
<td>68,62</td>
</tr>
<tr>
<td>02/03</td>
<td>17,766</td>
<td>7,894</td>
<td>88,82</td>
</tr>
<tr>
<td>03/04</td>
<td>20,093</td>
<td>9,069</td>
<td>11,024</td>
</tr>
<tr>
<td>04/05</td>
<td>22,122</td>
<td>9,922</td>
<td>11,298</td>
</tr>
<tr>
<td>05/06</td>
<td>25,703</td>
<td>10,442</td>
<td>15,258</td>
</tr>
<tr>
<td>06/07</td>
<td>28,097</td>
<td>11,232</td>
<td>16,865</td>
</tr>
<tr>
<td>07/08</td>
<td>31,398</td>
<td>12,099</td>
<td>19,299</td>
</tr>
</tbody>
</table>

1.5.3 Foreign PhD Students

In 2007 there were 17,251 actively registered doctoral students and 2,007 awarded PhD degrees. Of those starting doctoral studies in the year 2006/7 29% came from outside Sweden. Ten years earlier the corresponding figure was 14%. Of the foreign students 59% were men and 41% women. Of the foreign students 36% came from Asia, 25% from EU (exclusive of Nordic countries) and 2.5% from Nordic countries. The gender distribution for Swedish PhD students has been around 50/50 in recent years with dominance of women in the humanities and of men in engineering and part of natural sciences.

1.5.4 Case Example: How to Finance a PhD Student

In order to register a person as PhD student, the university has to arrange financing of the student. This financing can take several different routes. Foreign students compete with Swedish ones in regards to financing for similar conditions, except for the ordinary student grant for Swedes. This principle of financial support is of course an important element in the recruitment of good candidates – Swedish or international – for PhD studies to universities in Sweden.

Table 6: Routes for the Financing of PhD Students

<table>
<thead>
<tr>
<th>Route of Financing</th>
<th>No. of students</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employment, Doctoral Studentship</td>
<td>8,772</td>
</tr>
<tr>
<td>Other Employment in University</td>
<td>1,967</td>
</tr>
<tr>
<td>Doctoral Grant</td>
<td>1,722</td>
</tr>
<tr>
<td>Industry Doctoral Student</td>
<td>702</td>
</tr>
<tr>
<td>Employment as Physician</td>
<td>1,114</td>
</tr>
<tr>
<td>Employment outside University</td>
<td>1,456</td>
</tr>
<tr>
<td>Study Stipends (various)</td>
<td>1,373</td>
</tr>
<tr>
<td>Ordinary Student Grants</td>
<td>2,269</td>
</tr>
<tr>
<td>Total Number of Students Financed</td>
<td>19,375</td>
</tr>
</tbody>
</table>

---

22 Statistics Sweden is the source of these student mobility statistics.
1.5.5 Internationalisation Policy

In the 2004 research proposition, the Swedish Government formulated a strategy for higher education and in particular for its internationalisation:

1. Sweden shall be an attractive country for foreign students’ studies.
   • Universities and colleges shall offer an internationally competitive high quality education; and
   • Recruitment of foreign student shall increase.

2. University graduates shall be attractive on the national and international labour market.
   • The attractiveness of university graduates shall be strengthened; and
   • The mobility of Swedish students shall increase.

3. Universities and colleges shall work actively with internationalisation to promote quality in education and to increase understanding for other countries and cultures.
   • The international aspect shall be an element in the development work in higher education;
   • International mobility among teachers shall increase; and
   • The international dimension in the study programmes shall be strengthened.

4. Obstacles to internationalisation shall be removed both nationally and internationally.
   • Governing rules shall be reviewed and if necessary changed; and
   • Responsible authorities shall be active in the international development in higher education.

The Government’s 2004 strategy for higher education notes that the large and increasing offer of programmes and courses in English is another important condition for Sweden’s international competitiveness and strength as an attractive country for studies. It is important that courses in English are available on all levels in higher education. Lectures should also be given in other languages than English to a larger extent than they are today.

In 2004 no officially recognised Master or Bachelor degrees existed in the Swedish educational system. These were introduced in the academic year 2006/07. However, much earlier many universities gave unofficial Master programmes in English, termed ‘International Masters’. When the reform was realised the universities were therefore prepared to immediately launch many Master’s (and Bachelor’s) programmes. This was especially the case with universities of technology.

1.5.6 English-Taught Programmes at Swedish Higher Education Institutions

In the fall term 2008 over 500 programmes were offered in English:

<table>
<thead>
<tr>
<th>Type of Education</th>
<th>Total Number of programmes</th>
<th>120 ECTS credits (Master’s)</th>
<th>60 ECTS credits (1 Year Master’s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Technology, Engineering</td>
<td>248</td>
<td>205</td>
<td>43</td>
</tr>
<tr>
<td>Social Sciences, Economy, Law</td>
<td>138</td>
<td>79</td>
<td>59</td>
</tr>
<tr>
<td>Natural Sciences</td>
<td>88</td>
<td>71</td>
<td>17</td>
</tr>
<tr>
<td>Humanities</td>
<td>14</td>
<td>5</td>
<td>9</td>
</tr>
<tr>
<td>Medicine, Health Science</td>
<td>13</td>
<td>10</td>
<td>3</td>
</tr>
<tr>
<td>Interdisciplinary Studies</td>
<td>21</td>
<td>19</td>
<td>2</td>
</tr>
<tr>
<td>Arts</td>
<td>12</td>
<td>12</td>
<td>0</td>
</tr>
</tbody>
</table>
In 2008 the HSV questioned all university rectors whether Sweden’s language of instruction at universities should be English. There was no unanimous opinion; many rectors were in favour of English at the Master’s level but a large majority was against English at the Bachelor’s level. As a result, it is likely more and more Master’s level courses will be given in English.

1.5.7 Foreign Students at Swedish Higher Education Institutions

The many foreign students at several universities and university colleges are having a marked influence in Sweden’s classroom and campuses. For the most part, they give Swedish institutions an international atmosphere, which is considered very positive and is one of the important goals set up for the internationalisation of Swedish universities. In addition to the foreigners there are among the students many children of immigrants as seen in the table below.

Table 8: Students starting their studies 2006/07

<table>
<thead>
<tr>
<th>Students</th>
<th>Number</th>
<th>% of Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>All first-year students</td>
<td>81,200</td>
<td>100%</td>
</tr>
<tr>
<td>Swedish background</td>
<td>51,200</td>
<td>63%</td>
</tr>
<tr>
<td>Swedish with foreign background</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Of which born in Sweden with two foreign parents;</td>
<td>3,100</td>
<td></td>
</tr>
<tr>
<td>• Of which born abroad</td>
<td>7,700</td>
<td></td>
</tr>
<tr>
<td>Foreign students</td>
<td>19,200</td>
<td>24%</td>
</tr>
<tr>
<td>• Of which exchange students; and</td>
<td>8,300</td>
<td></td>
</tr>
<tr>
<td>• Of which free-movers</td>
<td>10,900</td>
<td></td>
</tr>
</tbody>
</table>

Two reports from the HSV present several proposals to increase the mobility of students by improving the application and admission processes and facilitating studies for foreign students. Actions suggested to the Government include proposals to:

- Increase co-operation and co-ordination between the governmental authorities involved in mobility and the universities which handle admission and registration;
- Give the universities possibilities to participate in the issuing of joint degrees;
- Create incentives for increased mobility of teachers;
- Stress the importance of Swedish-language provision for foreign students; and
- Stimulate co-ordination in internationalisation between Swedish universities.

Sweden will from autumn 2010/11 (at the earliest) introduce tuition for students from outside the EU/EEA region. At the same time a stipend system will be introduced to help students that cannot afford to pay for tuition. The details of this system are not known at present.

2 Mobility of Students and Staff

2.1 Nordic Student Mobility in a Global Perspective

From statistics from each of the Nordic countries we can see a decreasing trend in the number of Nordic students going abroad for a full degree. Several factors indicate why. The introduction of Bachelor’s and Master’s degree has opened up new possibilities at home and students are aware that fee levels at foreign universities are increasing while education remains free at home. In Norway moreover, the generous support scheme for studies abroad is ‘slimming’ down. No support was provided for tuition for Danish students at foreign institutions.

---

24 A list of English-taught programmes is available via the Study in Sweden website.
25 Data is provided by Statistics Sweden.
Table 9: Nordic Mobility

<table>
<thead>
<tr>
<th>Country</th>
<th>International Students</th>
<th>Outgoing</th>
<th>Incoming</th>
</tr>
</thead>
<tbody>
<tr>
<td>Denmark</td>
<td>Exchange</td>
<td>4,312</td>
<td>4,950</td>
</tr>
<tr>
<td></td>
<td>Full Degree</td>
<td>4,245</td>
<td>3,154</td>
</tr>
<tr>
<td>Finland</td>
<td>Exchange</td>
<td>6,880</td>
<td>8,610</td>
</tr>
<tr>
<td></td>
<td>Full Degree</td>
<td>5,340</td>
<td>4,360</td>
</tr>
<tr>
<td>Iceland</td>
<td>Exchange</td>
<td>213</td>
<td>376</td>
</tr>
<tr>
<td></td>
<td>Full Degree</td>
<td>1,944</td>
<td>2,705</td>
</tr>
<tr>
<td>Norway</td>
<td>Exchange</td>
<td>3,520</td>
<td>4,498</td>
</tr>
<tr>
<td></td>
<td>Full Degree</td>
<td>14,745</td>
<td>12,375</td>
</tr>
<tr>
<td>Sweden</td>
<td>Exchange</td>
<td>4,100</td>
<td>5,100</td>
</tr>
<tr>
<td></td>
<td>Full Degree</td>
<td>21,300</td>
<td>19,000</td>
</tr>
</tbody>
</table>

Table 9 shows incoming and outgoing students to and from the Nordic countries. Numbers – sourced from national data and not directly comparable – show that there is an upward trend in the number of Nordic students taking part in exchange programmes. Apart from Finland however, this increase in outgoing exchange students does not fully reflect the highly increased focus on internationalisation in the respective national strategies for internationalisation of higher education since the Bologna Process started in 1999. One probable reason is that the new Bachelor’s and Master’s programmes focus much more on efficiency than previous programmes did, even though the new programmes may have “time slots” for mobility.

Incoming mobility shows different trends. In Denmark, Finland and Sweden there has been a 70-80% increase in the number of incoming exchange students from 2000 to 2006. In Iceland numbers have doubled. Yet for Norway there has been no increase over the same period. One possible explanation could be that due to the country’s high cost of living one cannot easily survive in Norway on an Erasmus grant.

Numbers of international full degree students have increased significantly in all Nordic countries. For Denmark and Norway numbers have doubled; for Sweden they have tripled. All Nordic countries are welcoming international students to their higher education institutions, but because for non-EEA students immigration procedures may be more complicated and time-consuming, the number of successful non-EEA foreign student enrolments is much lower. One obvious reason for the large number of applications is of course the fact that higher education is fee free in Nordic countries.

Where do Nordic students go, and from where are international students incoming to the Nordic countries? Some examples have been given by national statistics in the previous chapter. However, it has also been commented that student numbers are counted in different ways. In the following, we shall use OECD Statistics as the common data base.

2.2 Intra-Nordic Student Mobility

As mentioned in the first chapter, free mobility of students between the five Nordic countries has been in practice for decades. Some historic data are given in reference 2.

Table 10 shows current intra-Nordic student mobility according to the OECD’s Education at a Glance 200827. As can be seen by comparison with Table 11, intra-Nordic mobility is a significant part of European mobility. The number of Nordic students going to other Nordic countries accounts for 42% of outgoing European mobility from these countries.

Table 10: Number of Intra-Nordic Student Enrolments in Tertiary Education (2006)\textsuperscript{28}

<table>
<thead>
<tr>
<th>Country of Origin</th>
<th>To Denmark</th>
<th>To Finland</th>
<th>To Iceland</th>
<th>To Norway</th>
<th>To Sweden</th>
<th>All Nordic Destinations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Denmark</td>
<td>47</td>
<td>58</td>
<td>863</td>
<td>1,947</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Finland</td>
<td>187</td>
<td>31</td>
<td>291</td>
<td>3,380</td>
<td>4,389</td>
<td></td>
</tr>
<tr>
<td>Iceland</td>
<td>1,634</td>
<td>245</td>
<td>478</td>
<td>2,386</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Norway</td>
<td>2,188</td>
<td>59</td>
<td>1,445</td>
<td>3,731</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sweden</td>
<td>1,342</td>
<td>53</td>
<td>6,782</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Norden</td>
<td>5,351</td>
<td>181</td>
<td>1,341</td>
<td>15,587</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

National histories are still reflected in Nordic student mobility; Norway and Iceland were under Danish rule for a long time, with Norway and Finland having been under Swedish rule at different times. A number of Finns have been living and working in Sweden, and more recently a number of Swedes are living and working in Denmark or Norway. Numbers in table 10 refers to the students’ citizenship (not to their country of residence).

2.3 Outgoing Student Mobility from the Nordic countries

Table 11 shows Nordic student mobility to the most popular European countries outside Norden. Generally, the United Kingdom is by far the most popular country for Nordic students for several reasons: institutional reputation, length of study and the fact that provision is English-taught. However, the number of Norwegian students studying in the UK has decreased in recent years, partly as a result of rising tuition fees for ‘third country’ students and lesser support from the Norwegian State Loan Fund. The surprisingly high number of Norwegians in Hungary and Poland are mainly medical students taking advantage of English-language medical schools in low-cost countries. There is a lively exchange between Finland and neighbouring Estonia (where the language is similar to Finnish).

The number of outgoing Nordic students enrolled in European institutions makes up 77\% of the outgoing student mobility from the Nordic countries.

Table 11: Nordic Student Enrolments in Other European Tertiary Education (2006)\textsuperscript{29}

<table>
<thead>
<tr>
<th>Country of Origin</th>
<th>Austria</th>
<th>Czech Republic</th>
<th>Estonia</th>
<th>France</th>
<th>Germany</th>
<th>Hungary</th>
<th>Ireland</th>
<th>Italy</th>
<th>Netherlands</th>
<th>Poland</th>
<th>Spain</th>
<th>Switzerland</th>
<th>UK</th>
<th>Total Europe (All Destinations)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Denmark</td>
<td>70</td>
<td>3</td>
<td>3</td>
<td>247</td>
<td>591</td>
<td>3</td>
<td>25</td>
<td>54</td>
<td>136</td>
<td>14</td>
<td>71</td>
<td>100</td>
<td>1,603</td>
<td>5,051</td>
</tr>
<tr>
<td>Finland</td>
<td>185</td>
<td>6</td>
<td>398</td>
<td>302</td>
<td>927</td>
<td>27</td>
<td>77</td>
<td>87</td>
<td>172</td>
<td>9</td>
<td>108</td>
<td>121</td>
<td>1,787</td>
<td>9,039</td>
</tr>
<tr>
<td>Iceland</td>
<td>22</td>
<td>2</td>
<td>--</td>
<td>49</td>
<td>111</td>
<td>34</td>
<td>9</td>
<td>20</td>
<td>84</td>
<td>1</td>
<td>12</td>
<td>13</td>
<td>346</td>
<td>3,119</td>
</tr>
<tr>
<td>Norway</td>
<td>60</td>
<td>195</td>
<td>--</td>
<td>346</td>
<td>663</td>
<td>750</td>
<td>181</td>
<td>107</td>
<td>256</td>
<td>739</td>
<td>62</td>
<td>88</td>
<td>3,059</td>
<td>10,510</td>
</tr>
<tr>
<td>Sweden</td>
<td>187</td>
<td>63</td>
<td>13</td>
<td>546</td>
<td>697</td>
<td>222</td>
<td>80</td>
<td>129</td>
<td>180</td>
<td>322</td>
<td>194</td>
<td>262</td>
<td>3,337</td>
<td>9,699</td>
</tr>
</tbody>
</table>

\textsuperscript{28} OECD (2008) op.cit.
\textsuperscript{29} Ibid.
Table 12 shows the mobility from each Nordic country to countries outside Europe. As can be seen, most of the traffic goes to OECD countries. The United States has been the traditional destination for a high number of international students. However, ever increasing tuition fees have reduced the attraction of American universities. Also, the introduction of three-year Bachelor's level studies in Europe counts against a four-year study in the US. Also in this table there is a Norwegian curiosity: the high number of Norwegian students in Australia due to a combination of reasonable tuition and living costs plus beautiful beaches in Australia and a Norwegian support scheme, presented for a few years a once in a lifetime opportunity to visit Australia.

Table 12: Nordic Student Enrolments in Tertiary Education Outside of Europe (2006)

<table>
<thead>
<tr>
<th>Country of Origin</th>
<th>Australia</th>
<th>Canada</th>
<th>Japan</th>
<th>New Zealand</th>
<th>United States</th>
<th>All OECD Destinations</th>
<th>All Reporting Destinations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Denmark</td>
<td>125</td>
<td>207</td>
<td>17</td>
<td>54</td>
<td>932</td>
<td>6,270</td>
<td>6,387</td>
</tr>
<tr>
<td>Finland</td>
<td>82</td>
<td>150</td>
<td>51</td>
<td>27</td>
<td>630</td>
<td>9,223</td>
<td>9,979</td>
</tr>
<tr>
<td>Iceland</td>
<td>28</td>
<td>45</td>
<td>14</td>
<td>12</td>
<td>454</td>
<td>3,666</td>
<td>3,672</td>
</tr>
<tr>
<td>Norway</td>
<td>1,810</td>
<td>288</td>
<td>40</td>
<td>211</td>
<td>1,343</td>
<td>14,063</td>
<td>14,205</td>
</tr>
<tr>
<td>Sweden</td>
<td>887</td>
<td>342</td>
<td>108</td>
<td>174</td>
<td>3,326</td>
<td>14,285</td>
<td>14,540</td>
</tr>
</tbody>
</table>

2.4 International Students in the Nordic Countries

According to OECD Education at a glance, the five Nordic countries had a total of 84,500 international students in 2006 (see Table 13).

Table 13: International Students in the Nordic Countries (2006)

<table>
<thead>
<tr>
<th>Country of Origin</th>
<th>To Denmark</th>
<th>To Finland</th>
<th>To Iceland</th>
<th>To Norway</th>
<th>To Sweden</th>
<th>To Norden</th>
<th>Total: All Reporting Destinations</th>
<th>Nordic Market Share</th>
</tr>
</thead>
<tbody>
<tr>
<td>In focus:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>China</td>
<td>2,066</td>
<td>1,444</td>
<td>15</td>
<td>630</td>
<td>1,267</td>
<td>5,422</td>
<td>451,526</td>
<td>1.2%</td>
</tr>
<tr>
<td>India</td>
<td>368</td>
<td>169</td>
<td>1</td>
<td>143</td>
<td>739</td>
<td>1,420</td>
<td>148,116</td>
<td>1.0%</td>
</tr>
<tr>
<td>Iran</td>
<td>205</td>
<td>115</td>
<td>1</td>
<td>274</td>
<td>733</td>
<td>1,328</td>
<td>28,811</td>
<td>4.6%</td>
</tr>
<tr>
<td>Iraq</td>
<td>213</td>
<td>22</td>
<td>--</td>
<td>219</td>
<td>311</td>
<td>765</td>
<td>6,845</td>
<td>11.2%</td>
</tr>
<tr>
<td>Pakistan</td>
<td>336</td>
<td>140</td>
<td>1</td>
<td>174</td>
<td>443</td>
<td>1,084</td>
<td>28,037</td>
<td>3.9%</td>
</tr>
<tr>
<td>Russia</td>
<td>432</td>
<td>1,114</td>
<td>20</td>
<td>772</td>
<td>745</td>
<td>3,082</td>
<td>49,200</td>
<td>6.3%</td>
</tr>
<tr>
<td>Regions:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Africa</td>
<td>866</td>
<td>1,131</td>
<td>10</td>
<td>1,380</td>
<td>1,391</td>
<td>4,778</td>
<td>361,191</td>
<td>1.3%</td>
</tr>
<tr>
<td>Asia</td>
<td>4,246</td>
<td>2,678</td>
<td>51</td>
<td>2,272</td>
<td>5,533</td>
<td>14,780</td>
<td>1,416,263</td>
<td>1.0%</td>
</tr>
<tr>
<td>Europe</td>
<td>10,916</td>
<td>4,575</td>
<td>564</td>
<td>6,500</td>
<td>20,599</td>
<td>43,154</td>
<td>745,756</td>
<td>0.6%</td>
</tr>
<tr>
<td>EU Countries</td>
<td>4,013</td>
<td>1,793</td>
<td>386</td>
<td>3,911</td>
<td>14,250</td>
<td>24,353</td>
<td>377,409</td>
<td>0.6%</td>
</tr>
<tr>
<td>North America</td>
<td>475</td>
<td>283</td>
<td>68</td>
<td>428</td>
<td>1,370</td>
<td>2,624</td>
<td>94,352</td>
<td>0.3%</td>
</tr>
<tr>
<td>South America</td>
<td>407</td>
<td>210</td>
<td>19</td>
<td>366</td>
<td>1,056</td>
<td>2,058</td>
<td>182,261</td>
<td>0.1%</td>
</tr>
<tr>
<td>Oceania</td>
<td>65</td>
<td>42</td>
<td>2</td>
<td>40</td>
<td>376</td>
<td>525</td>
<td>18,756</td>
<td>0.3%</td>
</tr>
<tr>
<td>Unspecified</td>
<td>2,330</td>
<td>52</td>
<td>1</td>
<td>3,310</td>
<td>11,124</td>
<td>16,817</td>
<td>122,687</td>
<td>13.7%</td>
</tr>
<tr>
<td>All Countries</td>
<td>19,123</td>
<td>8,955</td>
<td>715</td>
<td>14,296</td>
<td>41,410</td>
<td>84,499</td>
<td>2,924,679</td>
<td>2.9%</td>
</tr>
</tbody>
</table>

30 Ibid.
31 Ibid.
From Table 13 it can for instance be seen that more than 11% of Iraqi students abroad and nearly 5% of Iranian students abroad can be found in the Nordic countries. It may also be noted that 6% of Russian students abroad are studying in one of the Nordic countries. However, these are non-citizen students, not non-resident students, as can be seen from Table 14. With a high number of immigrants and refugees in the population, the difference between the two groups probably indicates their participation in higher education in Sweden, Denmark and Norway.

Table 14: International students in the Nordic countries (2006)\textsuperscript{32}

<table>
<thead>
<tr>
<th>Country</th>
<th>Non-Citizen Students of Reporting Country</th>
<th>Non-Resident Students of Reporting Country</th>
</tr>
</thead>
<tbody>
<tr>
<td>Denmark</td>
<td>19,123</td>
<td>10,952</td>
</tr>
<tr>
<td>Finland</td>
<td>8,955</td>
<td>--</td>
</tr>
<tr>
<td>Iceland</td>
<td>715</td>
<td>--</td>
</tr>
<tr>
<td>Norway</td>
<td>14,297</td>
<td>4,114</td>
</tr>
<tr>
<td>Sweden</td>
<td>41,410</td>
<td>21,315</td>
</tr>
</tbody>
</table>

Some 40,000 of the 84,500 international students in the Nordic countries in 2006 originated from countries outside Europe. With only 37,400 outgoing students from the Nordic countries in the same year, 11,400 of which were going out of Europe, there is a clear inward net flow. Countries receiving the majority of Nordic students are a different group from those sending students to Norden. This is in particular the case for full degree students.

On the global scale, the “market shares” of the Nordic countries are small – all together 2.9%. For countries that have been offering international students a free education, the “global market for educational services” may not be a very relevant concept. The number of international students is rapidly increasing however, having grown from two to three million from 2000 to 2006. Denmark has developed a strategy for an active participation on the global market for higher education. Finland and Sweden are on the move.

As from 2006, non-EEA students have to pay tuition at Danish universities, the current standard rate being €6,800 (US$ 9,610) per semester. In 2006 and 2007 only a few hundred students were enrolled as fee-paying. It is too early to say to what extent the Danish globalisation strategy will be able to recruit fee-paying students on the global market.

Finland is opening up for universities to charge non-EEA students tuition fees for courses given in the English language. Also in Sweden, fees to be paid by non-EEA students are being considered. These countries will – as has already been done in Denmark – introduce grants for underprivileged international students.

In Norway, there has been no discussion on the introduction of fees for international students. With Finland and Sweden following the example of Denmark, one might expect Norwegian higher education authorities at least to discuss the topic, but in April 2009 a loud and clear NO was heard from Stortinget.

Higher education shall prepare students for their personal development and for future careers, but not necessarily in their home country. After graduation, international students will represent highly qualified candidates to the labor market. To what extent will they return to their home country after graduation, to what extent will they wish to remain in the country where they qualified? Countries hosting international students may welcome students into their labour market or they may send them back home after graduation but internationalisation of higher education is connected to the international labour market.

\textsuperscript{32} Ibid.
2.5 International PhD Students and Degrees

In all Nordic countries, the three-tier degree system is in place, with the PhD as the third degree, as agreed in the Bologna Process. In most countries PhD candidates are seen as students, but in some countries as university employees.

Detailed and comparable statistics on this important group are not easily available. Denmark reports 353 international PhD students in 2006 of which 48 were from non-EEA countries. The total number of PhD students in Denmark that year was 5,339, with 974 PhD degrees having been awarded. Thus, the international element is relatively small at this level in Danish higher education.

From Finland it is reported that 164 out of a total of 1,405 Doctor Degrees (12%) granted in 2006 were to foreign citizens.

Sweden reports 17,251 PhD students and 2,860 PhD degrees awarded in 2006. Of those who started their PhD studies in Sweden that year, 29% were foreign citizens, 10% higher than the number six years prior. Because in Sweden the university has to arrange financing by employment or grant, this may be one reason for the high percentage of international students.

Norway also reports a marked increase in the number of foreign citizens awarded a PhD.

2.6 Case Example: The Norwegian Model

In Norway, because PhD candidates are not considered to be students they are subsequently excluded from student statistics. To be accepted for PhD work in Norway, the candidate must apply for a temporary position as “stipendiat”. International candidates may compete on equal terms.

As a result of an increasing number of “stipendiat” positions for PhD work at Norwegian HE institutions, the number of doctorates has more than doubled since 2000. The number of degrees awarded to foreign candidates was 81 in the year 2000, but by 2006 this number had grown to 308 or 24% of the total. More details are shown in Table 15.

Table 15 also shows where country of origin for foreign PhDs. A special programme supports candidates from developing countries. There is a marked increase in degrees awarded to men and women from Asiatic countries. A similar tendency exists in Sweden.

Table 15: PhD Degrees in Norway

<table>
<thead>
<tr>
<th>Citizenship/Award</th>
<th>2000</th>
<th>2001</th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
</tr>
</thead>
<tbody>
<tr>
<td>Norway</td>
<td>566</td>
<td>548</td>
<td>628</td>
<td>577</td>
<td>636</td>
<td>675</td>
<td>688</td>
<td>789</td>
<td>936</td>
</tr>
<tr>
<td>Norden</td>
<td>13</td>
<td>21</td>
<td>17</td>
<td>27</td>
<td>27</td>
<td>34</td>
<td>37</td>
<td>43</td>
<td>42</td>
</tr>
<tr>
<td>West/South Europe</td>
<td>20</td>
<td>30</td>
<td>22</td>
<td>33</td>
<td>37</td>
<td>42</td>
<td>50</td>
<td>55</td>
<td>83</td>
</tr>
<tr>
<td>East Europe</td>
<td>11</td>
<td>14</td>
<td>16</td>
<td>14</td>
<td>14</td>
<td>20</td>
<td>23</td>
<td>38</td>
<td>40</td>
</tr>
<tr>
<td>North America</td>
<td>4</td>
<td>3</td>
<td>5</td>
<td>6</td>
<td>5</td>
<td>7</td>
<td>8</td>
<td>7</td>
<td>11</td>
</tr>
<tr>
<td>Africa</td>
<td>15</td>
<td>27</td>
<td>17</td>
<td>31</td>
<td>30</td>
<td>37</td>
<td>38</td>
<td>42</td>
<td>54</td>
</tr>
<tr>
<td>Asia</td>
<td>15</td>
<td>33</td>
<td>28</td>
<td>31</td>
<td>29</td>
<td>36</td>
<td>54</td>
<td>49</td>
<td>64</td>
</tr>
<tr>
<td>Total</td>
<td>647</td>
<td>677</td>
<td>739</td>
<td>723</td>
<td>782</td>
<td>855</td>
<td>905</td>
<td>1030</td>
<td>1244</td>
</tr>
<tr>
<td>Foreign citizens</td>
<td>13%</td>
<td>19%</td>
<td>15%</td>
<td>20%</td>
<td>19%</td>
<td>21%</td>
<td>24%</td>
<td>23%</td>
<td>25%</td>
</tr>
</tbody>
</table>

Data provided by the Norwegian Institute of Studies in Innovation, Research and Education (NIFU-STEP).
There are of course Nordic PhD students at universities elsewhere, most of them in Europe and in North America. For instance, the Norwegian State Loan Fund for Education supported 258 PhD students (2007-08) working for their degrees at foreign institutions. Others may be supported by grants from foreign universities, which of course would not be detailed in home country statistics.

The traditional academic mobility of PhD students should not be forgotten. Many Nordic PhD students spend a semester or an academic year abroad before they finish their PhD work. There are certainly also a number of visiting PhD students at Nordic universities. However, more detailed information on this element of academic mobility is not available.

2.7 Staff Mobility – Academic Exchange and Job Migration

Increased staff mobility has been one of the goals of the Bologna Process, eagerly taken up also by the Nordic countries. Yet, the “Bologna vision” of staff mobility is not well articulated. There has been little consideration of objectives and means to reach them. What kind of mobility do we want to encourage, and how can it be realised?

In the Bologna Process, staff mobility has mainly been related to teacher exchange and the development of joint study programmes – traditional academic mobility. However, issues such as social security and pension rights have also been brought up, bringing in the aspect of job migration – another form for mobility. National labour legislation differs between countries – even within the EU, but not very much between the Nordic countries. Such legislation has an impact on higher education, for instance regarding regulations concerning the hiring and firing of staff, and permanent and temporary contracts. Visas and working permits have been obstacles for mobility between the EEA region and countries outside of it.

What is the present status of staff mobility, be it traditional academic exchange or labour market migration? It seems that our knowledge is limited; statistics are not very good and should certainly be improved.

In Norway, international exchange of staff between higher education institutions is reported on a regular basis. Exchange of academic staff has increased from around 1,500 in 2003 to more than 2,500 in 2007 for outgoing staff, and from 800 to nearly 1,600 for incoming visiting staff staying longer than one week. In 2007, 70% of the outgoing staff with known destinations went to other European countries, 13% went to North America, 8% to Africa and 7% to Asia. Of the incoming staff with known citizenship, 80% came from European countries, 7% from North America, 7% from Africa and 5% from Asia.

In Sweden, exchanges lasting more than one month are registered, with around 600 incoming each year since 2000, and the number of outgoing teaching staff increasing from around 300 to 500 over this same period.

More than 3,000 Finnish university and polytechnic teachers spent time at foreign institutions in 2000; this number increased to 4,627 in 2006.

Little is known about job migration of HE staff between countries. In a 2003 Report to the Research Council of Norway a survey of research staff with foreign citizenship was presented. The survey was made by coupling research personnel and population based on data from 2001. For the HE sector, the outcome was that 13% of the tenured staff in Norwegian universities and university colleges had foreign citizenship in 2001. More recent reports from individual institutions indicate that there has been a marked increase in job migration by university staff. The Norwegian University of Science and Technology reports

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that in 2008, 26% of the research staff had foreign citizenship, as well as 35% of those working for a PhD degree. The University of Oslo reports that 1,400 researchers, 25% of the research staff in 2008, had foreign citizenship.

Additional examples include the Technical University of Denmark, where 35% of the research staff had foreign citizenship, and 40% of PhD students. In Finland figures are lower; approximately 5% of full professors at Helsinki University and the Helsinki University of Technology are foreign citizens, respectively making 5% and 10% of total staff numbers foreign.

No data is available for first citizenship of tenured staff at Swedish higher education institutions. However it is clear that a large portion of the tenured staff have foreign citizenship. Many are refugees from European conflict areas, who fled after the Second World War as children with their parents i.e. from Hungary, the Czech Republic, Slovakia, and the Baltic States. More recently people have come from the Middle East, India, and Arab States. Many adults, especially those from Eastern European, had an academic background, thus facilitating their ability to find employment in the academic world (their children following in their footsteps). Judging from the number of undergraduate and graduate students presently in Sweden (respectively 37% and 29% of the total), the number of staff with foreign backgrounds will probably increase.

The effect of an increasing international teaching staff on the internationalisation of higher education certainly merits more attention.

For outgoing job mobility, no statistics are available, nor can it easily be established.

3 Nordic Challenges and Dilemmas

3.1 Internationalisation while Guarding National Languages and Cultural Heritage

Between the five Nordic countries, people may communicate using Danish, Norwegian and Swedish. (The Icelandic language developed from Old Norse a thousand years ago. The Finnish language is completely different, as is the minority Sami (Lappish) language spoken in Northern Norway, Sweden and Finland.) Historically, links between Finland and Sweden have been strong, as have links between Denmark, Iceland and Norway. Finns and Icelanders usually have an understanding of the Swedish language, and Islanders of Danish, because of their shared cultural heritage. For this reason, Nordic co-operation has not been seen as a process of internationalisation per se, but more as a process of broadening out ‘home ground’. Adjustments to studying in Denmark are easily made for example, if coming from Iceland or Norway. There is a Nordic declaration of languages saying that any citizen of a Nordic country shall have the right to use her/his own language in necessary contacts with public authorities in other Nordic countries.

Although higher education internationalisation presently implies English-taught courses and study programmes, it also means internationally relevant curricula. At the same time, all Nordic countries are very much aware of the importance of taking care of their language(s) and their cultural heritage. This should not be contrary to internationalisation of higher education – the Bologna Declaration underlined the importance of fully respecting of the diversity of cultures and languages.

There are a number of reasons for this:

- **The political argument** – the majority of the population speaks and writes a national language that cannot be eliminated and that must be under continuing development;
- **The cultural argument** – the language reflects and expresses a national world of experience;
• **The mental argument** – the national language is an integral part of citizens’ personality and consciousness, and thus most operative in daily life, including in the arts and sciences; and

• **The global argument** – language is a contribution to the richness of languages in the world.

In the Nordic countries, teaching of English in schools starts in elementary school and continues all the way through 12 years of compulsory schooling, which means that English generally is widely spoken and understood across the population. However, to use English as the language of instruction takes further training for students as well as teachers and this is often done through studies abroad in English-speaking countries. For this reason, at universities Bachelor’s level programmes often are taught in the national language on the basis of English textbooks, and Master’s level programmes instructed in English. Conversely, this is not the case in Iceland, where only a few Master’s programmes – intended for international students – are offered in English.

In terms of other languages, while German and French are loosing momentum in the Nordic countries, Spanish is gaining popularity. The Russian language has become an important tool in expanding contacts with the Russian Federation, especially perhaps for Finland and Norway. The number of university staff with a Russian background is increasing, highlighting the potential for internationalisation strategies looking towards the East.

However, the academic expertise might expect more profound demands on language abilities in the future. If China’s economic growth continues, and that of other Asian countries, Nordic citizens will be more exposed to languages which presently, only a limited number of people there speak. Thus universities (and large companies) must find ways to strengthen the possibilities of learning and mastering languages likely to influence processes of globalisation in the coming years.

As public institutions, universities in the Nordic countries have a responsibility for safeguarding cultural heritage in education and research in fields such as national language(s) and literature. The 1995 Norwegian law on universities and colleges stated that the language of instruction normally is Norwegian, implying that there should be a special reason for not using a version of the national language (*bokmål, nynorsk*). In the current law, the reference to the language of instruction has been removed, opening the doors for teaching in English. Responsibility for language is implicit.

Internationalisation has caused a switching from the national language to English in teaching, but it has also – backed by the argument of quality improvement – focused on publication in internationally recognised journals, most of them using the English language. Will the smaller languages die out? Clearly, this is a concern in more than one country.

### 3.2 Case Example: A Discussion in the Danish Parliament

Political discussion in presently ongoing in the Danish parliament (*Folketinget*) and among academia whether Denmark should take specific measures to prevent the overtaking of Danish by English. How is it possible to progress the use of Danish in scientific and technically advanced matters? A relatively high number of Danish parliamentarians are of the opinion that the statutes of the Danish universities should be altered in such a way that the institutions will be obliged to ensure a parallelism between Danish and English in their curricula in order for Danish to develop in such ways that scientific subjects may be discussed and handled in Danish. Parliamentary discussion remains unsettled; debate also remains in the public domain.

Presidents of Danish universities, who have embarked on the public debate on the above issue, have mostly declared the issue a non-issue already solved by the combination of
Danish-taught Bachelor’s programmes and English-taught Master’s programmes in their institutions. Also, if there is one thing which is difficult to regulate politically it is the evolutionary development of languages which, in accordance with situation, cultural conditioning and international contact, changes in unexpected and unanticipated ways over time.

3.3 A Bilingual Population?

We believe that use of the English language in academia (and industry) will become increasingly common and as a result, a growing number of people in the Nordic countries will become bilingual. Despite the concern voiced by politicians however, we do not think that our Nordic languages will lose their influence in daily life; in contrast, we believe that in the future it will be possible rather, to discuss science in our mother tongues. That being the case, Nordic languages (Danish, Finnish, Norwegian, Swedish) will continue integrating English words into daily conversational language as they always have done, although perhaps now more rapidly. Iceland again is the exception; in Iceland there is a strong tradition not to assimilate international concepts directly into the language but to use words based on Icelandic that can fit to the system of grammar.

3.4 Prospects for Higher Education in the Nordic Countries

50 years before Bologna, the social dimension of higher education was seen as a central element in the expansion and broadening of higher education systems in the Nordic countries. There were no tuition fees and in each country a financial support system was set up to give all young people equal opportunities for a higher education. Activating the intellectual potential of the population may be one of the reasons for the success of the Nordic model.

It has been argued both by politicians and economists that the money might have been used more effectively in a support system combining tuition fees and grants, placing more responsibility with the students for studying full-time and finishing on time. Over the years some adjustments have been made; for instance partially converting grants to loans or introducing a bonus for those finishing on time. Such changes have generally had little effect on students in their home country. One possible explanation might be that although student organisations claim that loans and grants should be sufficient for full-time studies, individual students today prefer a combination of studies and part-time work for a more comfortable life. The introduction of the concept of lifelong learning has perhaps been most quickly taken up by the young. However, the right for a free higher education is so deep-rooted in the Nordic countries that it might be ‘political suicide’ to propose a change to the system. Most probably the Nordic countries will continue a no-fee policy in state institutions for their home students. Private institutions may charge tuition fees. The fact that private institutions in Iceland receive funding from the state according to the same rules as public universities (the same amount per student), has led to the discussion whether the public universities should also be allowed to charge tuition fees.

Students who consider going abroad for their degree have been more heavily reliant on the support system than home students. Support for studies abroad may not cover all costs and possibilities for part-time jobs may not be good for foreign citizens. Costs become an element when deciding where to go, even more so when tuition fees in some countries may be significantly more than that which can be obtained from the support system in the home country. For example, even with the still generous support scheme of the Norwegian State Loan Fund, the high tuition fees at UK and US universities have drastically reduced the number of students going to those countries. Further restrictions in the support scheme turned out to effectively halt what was an exodus to Australian universities. On the other hand, the possibility of English-taught medical education in low-cost countries in Eastern Europe has considerably increased the student flow to, for instance, Hungary and Poland. If
Norwegian authorities should decide that the country will not need a higher density of medical doctors (already among the highest in Europe), they may simply stop supporting medical studies abroad. It has happened before, it may happen again.

When foreign students in an increasing number of countries are seen as a potential source of income and international higher education has been defined as a service to be traded under the regime of GATS and the World Trade Association, it may be logical for governments supporting students abroad to see this more as an import of services to the country than as a benefit for the students. Schemes for the support of international students may be changed accordingly. Even in the Nordic countries the right to higher education may not in times to come imply the right to ‘buy’ an education on the global market, sending a substantial part of the bill to the government in their home country. Should the home country pay for an international education if the candidate does not come back after graduation?

In Denmark, exporting higher education is a central element in the government's globalisation strategy. A report by British experts to Cirius, the Danish agency for international education, pointed out that Denmark has great potential for international higher education and projected the possibility of a significant income to Danish universities and to the Danish society by copying UK strategies. Attracting more international students would have multiple impacts for Denmark including revenue generation, meeting professional skill gaps, assisting trade and diplomacy. Estimates from a sample 2,000 students put overseas student contribution to the Danish economy at DKK 150 million (US$19 million, €13.8 million) in fees plus DKK 800 million (US$103.6 million, €73.7 million) from personal expenditures and income tax payments. Costs to the Danish Government were estimated at approximately DKK 200 million (US$25.9 million, €18.4 million), most of it for programme delivery, and only DKK 4 million (US$0.51 million, €0.37 million) on scholarships.

The OECD's most recent Education at a Glance publication reported 2,000 Chinese students in Denmark in 2006 and some 1,600 from India, Iran, Iraq, Pakistan and Russia (see Table 13). Statistics from Cirius give more details; in the academic year 2006/7 there were some 2,600 international non-EEA degree students in Denmark, including 1,115 from China and 169 from Pakistan (the second biggest sender of students to Denmark). The number of new non-EEA degree students in Denmark in the academic year 2006/7 was 782, down from 1,288 in the previous academic year and the last one before tuition fees were introduced. According to Universities Denmark, only 178 non-EEA student paid tuition fees in 2006, only 322 in 2007. It will take time to reach the estimated level of 2,000 fee-paying students. Marketing efforts will be increased and more money has to be allocated for grants.

There is another element in the globalisation strategy (also mentioned in the report to Cirius referred to above) that may be more important than income from tuition fees: the recruitment of highly qualified specialists to the Danish labour market. This by itself may be worth the effort of the ongoing internationalisation of Danish higher education.

In 2009, Finnish legislation is discussing charging tuition fees from non-EEA students taking part in English-language higher education programmes. The introduction of fees for non-EEA students is also under consideration in Sweden. It will be interesting to see which conclusions the Finnish and Swedish governments draw from the Danish experience of introducing tuition fees. An interesting element is that in both countries, grants will be introduced to support students that cannot afford to pay. This indicates that the social dimension in higher education will include the foreign students also in coming years. Exporting higher education

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36 See Cirius.
37 For more information, see the website of Universities Denmark.
for profit does not seem to be the driving force; rather, it is probably the recruitment of qualified specialists to the national labour market.

Thus, the differences between the approach of these three countries and the no-fee policy of Norway may after all not be a problem for their continued co-operation. Governments in the Nordic countries may still agree that the social dimension should include their international students, although the support system might differ for national and non-national students. Most other student benefits will be the same for the two groups. International students will have special awareness regarding housing and they will be allowed to work part-time to further finance their studies. After graduation, international students may increasingly be recruited to the national labour markets in the Nordic countries as highly qualified specialists. This will be most relevant for candidates with a Master’s Degree and for PhDs candidates.

Clearly, measures to limit the brain drain from developing countries will be necessary. In Norway, students from developing countries are supported on equal terms with Norwegian students. To stimulate the return to the home country, loans from the Norwegian State Loan Fund for Education will be converted to grants after a year at home. However, international standards will be needed to prevent developing country graduates from being actively recruited by more affluent developed countries.

Student exchange and full-time studies abroad are usually presented together under the common label of mobility. However, whereas participation in an exchange programme brings the student back to the home institution for continuing study and graduation, the full degree study and graduation in a foreign country brings the student in much closer contact with that country, in many cases with strong bonds like by marriage. As countries more and more open their labour market to highly qualified foreign citizens, higher education may also be a starting point for a migration process. Thus, statistics on student mobility should differentiate between the two types of mobility. Also, there should be a distinction between foreign citizens living permanently in a country with rights equal to those of the country’s citizens, and those being admitted as students. The various tables in the previous chapter illustrate the difficulty of using the statistical material for analysing effects of international higher education.

3.5 International PhD Students – Early Stage Researchers

In the Nordic countries research training has followed different patterns but in recent years organised programmes and guidance have been developed in each country. The development was well reflected at the 2003 Berlin Ministerial Conference, where the doctoral level was included as the third cycle in the Bologna Process, linking higher education and research. Two years later in Bergen, Ministers pointed out that the core component of doctoral training is the advancement of knowledge through original research. Ministers saw participants in third cycle programmes both as students and as early stage researchers.

In most countries, participants in third cycle programmes are formally identified as students. In Norway and Sweden they are university employees for the duration of their programme. Admission to a doctoral programme will be formalized through a written agreement with the higher education institution. The agreement shall ensure that the doctoral student is a regular participant in an active research environment. It shall also guarantee that adequate provisions are made to enable the student to complete his/her programme in the specified period of time. In Denmark the PhD students will have a three-year university employment from the start of their programme. In Finland there exist special doctoral schools for full-time studies but most PhD students work as research assistants in major research projects or in industrial research laboratories.

This principle of financial support for the student is of course an important element in the recruitment of good candidates – nationally or internationally. Both in Norway and Sweden foreign citizens may apply and compete with national candidates on equal terms. In both
countries, the number of international PhD students and the number of degrees awarded to foreign citizens is increasing rapidly – presently around 25% of the total. Individual institutions report even higher figures, as much as 40% (Technical University of Denmark). This is a very interesting development and obviously broadly important for international researchers and higher education teachers in the Nordic countries.

3.6 An International Teaching Staff

In all Nordic countries, the internationalisation of higher education has been seen as one element in a strategy for meeting international and global challenges. Educating for a national labour market or for an international or global labour market has not always been made clear by the Ministry of Education. For any Ministry of Labour, the national labour market is conversely, of prime concern.

All Nordic countries and most European ones face a shortage in the national recruitment of skilled workers and specialists in the coming years. Immigration policies are being adjusted for a dual purpose: to limit the flow of refugees; and to increase the flow of highly qualified specialists. Within the EEA there is in principle a free flow and mobility might be stimulated by EU programmes and by national schemes.

However, it should be made clearer that there are two types of mobility, traditional academic mobility in the form of exchange or a shorter stay abroad, and more one-sided recruitment of international students and candidates for the national labour market.

The EU Commission has recently made some very visible efforts to stimulate the mobility of researchers, introducing the European Charter for Researchers and the Code of Conduct for the Recruitment of Researchers (2005), the Scientific Visa for researchers from third countries (2005), and the proposal of Social Security and Supplementary Pension Rights for Researchers. A Human Resources Strategy for Researchers has been announced (2008) for better job opportunities for researchers. Thus, the Commission is now focusing more on job migration, and less on academic exchange.

For higher education this will mean that the teaching staff will become more and more international, opening up new possibilities in the process. Russian-born professors may give courses in Russian, and Chinese-born professors may lecture in Chinese – for instance at the University of Tromsø or the Technical University of Denmark. English professors will master the language of the most popular courses for international students. To make use of this potential, we must know the ethnic background of the staff. In some countries it is not allowed to include this in the data base as it is seen as confidential information, but there must be ways that higher education can be allowed to make the best use of its international staff instead of labelling them all as employees of a Norwegian or Swedish university.

3.7 Recruitment of Highly Qualified Specialists

Society today in the developed world is technologically advanced in all its aspects and activities. We depend on advanced information technologies, biotechnological methods for inventing and producing medical treatments for all types of deceases, fermentations and production of energy resources from biological waste, operation methods relying heavily on advanced equipment which allows doctors to do surgery internally in the body, production of new chemicals with predesigned characteristics, low energy vehicles for all types of transportation, etc.

To remain as much control as possible over unforeseen effects of technological development, to develop the necessary legislation, to structure the modern society and to keep us entertained with arts and performances of all kinds takes a well-educated population and a fair number of highly qualified specialists.
The way in which these demands are structured seen from a governmental point of view will include aims to:

- Achieve at least 50% higher education participation levels in each annual cohort;
- Stimulate universities to focus part of their research on subjects relevant to industry and future needs of society;
- Stimulate dialogues between universities decision makers and industry; and
- Recruit specialists from abroad.

All Nordic countries are small – one very small – which means that our higher education and research systems will not be able to cover all specialities which may be seen as interesting and profitable research areas. Although birth rates vary by country (in Denmark, 1.4, and Norway 1.96), each Nordic country is in addition, an ageing one. In order to handle this situation in relationship to the proper development of our societies, we need a well-educated population but evidence shows that there is a lack of highly educated specialists in a number of areas, in particular within medicine, natural sciences and technological sciences. Consequently, we have to look abroad for recruitment of the right type of specialists. This is presently much more actively done in Denmark than in Norway. Methods used in Denmark include green card arrangements for certain professions, special salary arrangements, proper and inexpensive schooling for accompanying children, job opportunities for accompanying partners and special (low) tax arrangements. Foreign specialists working in research are eligible for ensured income tax at a maximum of 25% for a limited period, which is approximately half of the normal taxation level in Denmark. This has helped attracting foreign specialists, but if they don't bring their family, they usually leave again. Also in Finland there is a lower taxation rate for foreign specialists. Some of the schemes used in Denmark are applied in Sweden as well, but have thus far proven less effective there in comparative terms.

The characteristics of a foreign specialist staying permanently in a Nordic country is for the time being either a person who has come as a young student and who during his/her time as a student acquired a partner locally, or a foreign specialist who met a Nordic colleague somewhere in the world and joined the home-returning partner. New initiatives from the EU Commission to stimulate mobility, like those described in the previous section (the Euraxess Portal, the Scientific Visa, supplementary pension rights, etc.) may change the situation.

### 3.8 Mobility Barriers

#### 3.8.1 Outgoing Mobility

Nordic students are quite mobile and support schemes are generally quite generous. However, as nowadays young people often work for a year or two and then often travel around the world before starting their studies, they are older when they start begin a higher education degree. They may prefer to simultaneously work, or they may have a partner, which makes going abroad for a full degree less tempting (and perhaps, feasible). For this reason, the need for specialised, high-level education for the good of the country could be met by making student support schemes not only more selective but also more generous. Nordic university staff may be willing and eager to participate in exchange schemes. Many may be interested in an international career, possibly spending a few years at a well-known university. Because Nordic families tend to be a two-career families – with both partners having to consider what is best for children/dependents – options tend to be narrower in scope. Other barriers for outgoing staff mobility may be loss of social security and pension rights. One should not expect national governments to stipulate their university and research staff to emigrate, however, it would be an advantage both to the country and the individual to have schemes that stimulated research staff to leave for a period and come back again. One possible mechanism could be an extended leave of absence from the home institution, including a continuing membership in the social security and pension system of the home country.
Since most Nordic students and researchers who leave their home country for a shorter or longer period go to another EEA country, formal barriers for going abroad are mostly non-existent. Yet both students and staff may have reservations or they may meet practical problems like those mentioned above. For research staff the attitude will probably change as new initiatives by the EU Commission (mentioned in section 4.4) gain force. The European Charter for Researchers and the Code of Conduct for the Recruitment of Researchers will to a large extent clarify conditions for doing research work in another EEA country. A future realisation of social security and supplementary pension rights for researchers will certainly make job migration easier.

3.8.2 Incoming Mobility

The EU student exchange programmes have been instrumental in bringing European exchange students to the Nordic countries. However, the basic support they have from their home country varies greatly. As living costs are high in the Nordic countries, there might be economic barriers for many students coming here.

For full-degree students, the economic aspects are even more important. As the expected increase in international full-degree students will come from non-EEA countries, paying tuition on top of high living costs will be a real barrier for many. A system of grants for fee-paying students will be necessary.

A challenge for international students, and staff alike, considering coming to one of the Nordic countries is the language – more or less difficult to learn and only useful within the region. For a temporary visit, English may be used for study purposes or for research. For a more permanent stay, one should be familiar with the language of the country.

For some, the beautiful nature and the possibilities for outdoor activities may be an attraction; others may see the tough climate and remote location far from the centre of Europe as a barrier against coming.

For people coming from outside the EEA region it can be troublesome and time-consuming to get the relevant permits to stay and for working. Immigration laws are quite restrictive, although changes are taking place as all countries need high level specialists. For Denmark there are green card arrangements for some personnel groups. However, the new EU Scientific Visa for researchers from third countries may be what is going to open the door more widely.

After being allowed in, you may meet many practical problems. Legislation which has been introduced in response to today’s political realities is making it difficult for foreigners to open bank accounts. You need a Personal Registration Number, and such a number can only be acquired if one is present in the country and in possession of a residence permit. And while you have to wait for it, the PR Number is necessary for medical and several other services. In the meantime, salaries go unearned.

Taxes are high because you pay for many public services like education and medical treatment through them. You may use all those services if you live permanently in the country, but if you intend to stay for a few years and do not bring a family, it is money gone.

Nordic automatic and obligatory payment to retirement benefits into pre-determined pension funds may be fine if you are a permanent resident, but may not be seen as such a good idea for mobile employees.

Much work and promotion needs to be done in order to ease internationalisation in the Nordic countries. It has to be done. We need a society where mutual understanding across borders can be used to ease tensions and conflicts arising out of religious and cultural differences.
3.9 A Nordic Platform for Meeting Global Challenges?

Nordic co-operation in higher education still functions in much the same way as it did in the 1990s with student and staff exchange, open access to institutions in neighbouring countries, joint seminars, etc. However, it has adapted to changes taking place in the world around it. It can be seen as a successful regionalised form for internationalisation. Is it too close to home to come under the label “internationalisation”? Referring to another popular term in higher education policies of today, we may see Norden – the Nordic countries – as a subspace of the EHEA, both adhering to the principles and procedures of the Bologna Process and reducing the need for special procedures within Norden.

But let us not forget that many Bologna principles had been previously established within the Nordic co-operation, such as open access, institutional collaboration, mutual recognition of degrees and study periods. The Bologna Process added a common three-cycle degree structure in all Nordic countries, and national quality assurance systems functioning in a Europe-wide network – of course also between the Nordic countries.

Looking further out however, and towards a global market for educational services, the Nordic countries are individually small countries in a big world.

In March 2009, the web page of the Nordic Council and the Nordic Council of Ministers brought the following news:

**The Nordic Region as a model in education**

“Quality and Development in Nordic Higher Education” is the title of a conference being held in Iceland in April to improve the standing of the Nordic Region in the highly competitive international education market. In many ways, the Nordic countries act as a joint market for education and the conference agenda includes topics such as: Are Finnish degrees as good as Norwegian ones? Is it possible to guarantee uniform quality in multiple countries?

A joint Nordic quality assurance system would put the Nordic countries in a strong position in the highly competitive international education market. The conference represents the first step towards formalising co-operation on quality assurance throughout the Region.

Last year, the Nordic Council of Ministers launched a series of Nordic Master programmes, each of which involves three institutes of higher education in three different countries working together to offer a joint programme. The scheme has been a huge success, and an evaluation of the programmes will be presented at the conference.

On a more general level, the conference will also draw attention to the uniquely 'Nordic' model for free and open education and promote even greater freedom of movement on the Nordic education market”.

It is, however, the opinion of the authors of this report that the Nordic countries don’t act as a joint market for education. Seen from outside, the Nordic Region has no standing in the international education market. There is no joint policy or joint marketing. Referring to the Nordic model for free education is not fair in reference to the market, as tuition fees have already been introduced in one of the Nordic countries and another two might follow, whereas the remaining two will abstain.

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38 See Norden’s [website](#).
Universities in the Nordic countries are co-operating nationally and internationally. An interesting Nordic example is the Øresund University, which is a co-operation agreement between 12 universities in the Øresund region, with the University of Copenhagen and the University of Lund acting as regional frontrunners. The major activity of this entity is a number of international summer schools which run every year, especially within more specific scientific areas as biomedical research.

Higher education institutions in the Nordic countries are actively collaborating with sister institutions in Europe, developing joint study programmes and exchanging students and staff, much of it which is supported by EU programmes. The Erasmus Mundus programme is further opening up Europe to the rest of the world.

There are many examples of Nordic higher education institutions working together with non-European institutions. The Nordic Centre at China's Fudan University in Shanghai was established in 1995 in co-operation between 23 Nordic universities and Fudan University. The centre, which is the only Nordic academic consortia in China, focuses on three areas: being a platform for initiating and developing research and educational activities, inviting Chinese students to study in the Nordic countries (and likewise Nordic students studying in China) and organising programmes and seminars for Nordic companies in the Shanghai area.

Another example of mutual initiatives is Nordic co-operation within an institution in Thailand, the Asian Institute of Technology (AIT) in Bangkok. Organisations for development aid in Nordic countries launched this institution 50 years ago so as to promote technological change and sustainable development in the Asian-Pacific region through higher education, research and outreach. Some of the authors of this report have been members of the scientific advisory board of AIT, and are impressed by AIT's impact in the region, making it a fine example of a Nordic common initiative.

These are examples of co-operation, but what about competition? Universities may compete as well as co-operate. They compete for students nationally and internationally. For state institutions as in the Nordic countries it is up to the government to set the rules. However, there are no common Nordic rules for competition and marketing in higher education.

Do governments in the Nordic countries want a common platform for meeting the global challenges? Do they want co-operation or competition – or co-operation and competition? Will they stimulate exchange of students and staff or do they mainly want to recruit to their own home country?

It is high time that the Nordic Council of Ministers engages in a serious discussion about these issues. The Nordic countries are ‘buyers’ on the global market for education. One country has also established itself as a ‘seller’, and one or two more may follow. Will a common approach to the challenges of the market be possible? Can the Nordic model for free and open education survive? As we see it, only if the social dimension of Nordic higher education also in a proper way will include international tuition-paying students.
Resources


DATABASE FOR STATISTIK OM HØGRE UTDANNING


MINISTRY OF EDUCATION, SCIENCE AND CULTURE (ICELAND)

MINISTRY OF EDUCATION AND RESEARCH (NORWAY)

MINISTRY OF EDUCATION AND RESEARCH (SWEDEN)


NORWEGIAN CENTRE FOR INTERNATIONAL CO-OPERATION IN HIGHER EDUCATION

NORWEGIAN INSTITUTE OF STUDIES IN INNOVATION, RESEARCH & EDUCATION (NIFU-STEP)

NORWEGIAN STATE FUND LOAN FOR EDUCATION


STATISTICS SWEDEN

STUDY IN DENMARK

STUDY IN FINLAND

STUDY IN NORWAY

STUDY IN SWEDEN

UNIVERSITIES DENMARK