

Institutional Environment Guideline Descriptions of National Environments - SWEDEN -

e-Learning in Higher Education in Sweden

The Swedish Higher Education system

In Sweden the state is responsible for all activities in the higher education sector. The Swedish Riksdag and the Government decide what regulations are to apply and how resources are to be allocated. There are 14 state universities and 22 state university colleges in Sweden. In addition there are 3 independent higher education institutions that are entitled to offer postgraduate programmes: Chalmers University of Technology, the Stockholm School of Economics and Jönköping University Foundation. There are also ten university colleges that are independent programme providers entitled to offer undergraduate programmes and a number of course providers entitled to award qualifications in psychotherapy.

Universities and institutions of higher education offer student specific programmes or individual courses of study. In 2004 there were 337 415 students registered at Swedish universities and university colleges in undergraduate studies. 60% of them were women and 56 % were above the age of 25 years and the median of the student population was 25 (women 26, males 25). This seems to indicate that Higher education in Sweden does not always recruit students directly from upper secondary school; many of the students work, travel or do other things before entering tertiary education.

The operations of Higher Education institutions are governed by the statutes and regulations that apply in the field of higher education. They are also regulated by the framework and resources determined by the Swedish Parliament and the Government. The higher education institutions enjoy a great deal of freedom within the framework of the regulations and parameters laid down by the Swedish Parliament and the Government. The institutions themselves decide how to plan their operations, utilise their resources and organise their programmes. The institutions are funded to a great extent by state allocations. They receive funding for undergraduate programmes based on the number of enrolments and student performance. They also receive funding to be used for postgraduate programmes and research.

The Swedish National Agency for Higher Education is the central agency that deals with issues affecting universities and higher education institutions in Sweden. The Agency conducts quality audits of higher education, exercises supervision of the higher education institutions, reviews and analyses the higher education system, evaluates qualifications awarded abroad, supports educational innovation and development and also provides information on higher education and encourages student recruitment.

e-Learning in Higher Education

Efforts to promote e-Learning in Sweden can be witnessed in the role of ICT support centres at various universities. At Umeå University the Centre for Educational Technology (CUT) is responsible for the university's coordinated effort to develop the use of modern information and communication technology, ICT within different forms of education. CUT assists teachers in developing courses and programmes utilising information and communication technology. This can be both in courses delivered on campus and also net-based education. Further, CUT offers both regular and tailor-made courses such as specially designed courses in the use of technology and arranges seminars for university employees according to current needs and requests within the field of ICT in education.

At the University of Lund, sections of the traditional distance learning department have been transformed into e-Learning departments. They now reach, for example, university learners in the Baltic States and support them in research capacity building. Another effort is the Oresund University which is a consortium of 13 universities in Sweden and Denmark in the Oresund region. Within this university, there is IT Oresund, which is a collaborative effort between the Swedish and Danish IT players. The purpose of this organisation is to establish an IT environment that will be responsible for the development of business, education and research in the IT sector¹.

The IT University (Stockholm) is a joint venture between the Royal Institute for Technology and Stockholm University. It is a virtual organisation with departments and centres forming the name IT University. This partnership began in 1999 and from 2001, Karolinska Institutet (Karolinska Medical University) is also a participant. In the fall of 2001, they offered an educational program called IT medicine. The physical location is at Kista, a section of Stockholm City and a world leading hub for mobile communications and IT companies. In 1999, the IT University had a total of 3500 students and 140 researchers. Its turnover was SEK 400 million².

Although higher education in Sweden is highly subsidized by the government and institutions have a policy of non-tuition fees, e-learning is seen as an effort to generate income through consultancy and other services.

However, there are also some doubts as to the future development of ICT in Higher Education. In an analysis of the Swedish IT policy and the situation at universities and university colleges, researchers³ conclude that:

- there is a lack of empirical data on IT and the use of IT within higher education
- IT is not an integrated part in strategies and plans of the institutions for higher education
- instead of strategies development projects are setting the agenda
- few incentives for innovations and changes with or without IT
- for a positive development of IT usage in tertiary education there is a demand for clear indication of the goals for education and research.

The role of the government

Structures/organizations supporting e-Learning:

Swedish Net University Agency

The Swedish Agency for Distance Education (DISTUM) was launched in 1999 as a state authority concerned with the development of ICT-based learning. DISTUM has supported flexible learning within colleges and popular adult education with ICT initiatives. A number of doctoral studies investigating the role of ICT in education have also been sponsored through DISTUM. On 28 February 2002, DISTUM was disbanded to give way to the Swedish Net University.

The Swedish government launched the Swedish Net University March 1, 2002. A total of 35 colleges and universities combine to form this Net University, and share a government grant amounting to SEK 211 million. This enables them to register ICT-based programs. Participating institutions received financial support for courses and methodology development over a period of three years, 2002-2004.

The goal for the Agency is to develop a powerful, high quality, relevant support for the Swedish Net University. Measures taken in all areas are dependent on good contacts and a close cooperation with the participating universities and colleges.

¹ www.itoresund.org

² www.it.kth.se/engelsk/education/index.htm

³ Dr Jan Hylén and Dr Johan Groth, Metamatrix Development & Consulting AB, Oct. 2003.

The Swedish Net University Agency today works within four principal areas:

- Information and marketing of courses via a web gateway
- Development of IT-supported distance education within important areas
- Development of knowledge and exchange of experiences
- Administration and coordination of activities within the Swedish Net University

In the Government Bill "New world – new university", 2004/05:162 the government proposed new tasks for the Swedish Net University Agency, namely broader recruitment, national support for pedagogical development and changes in the structure of higher education and degrees. In combination with these new tasks the Swedish Net University Agency changed name to the Swedish Agency for Networks and Cooperation in Higher Education, 1st January, 2006.

Priority is given by the Agency to the identification of areas where IT-supported distance studies are lacking. This is done by compiling and analysing information about the demand for university courses. The specially identified areas are nursing science, teacher training, and caring science. The Agency stimulates development of new courses and programmes through projects, where special consideration is given to encouraging cooperation among universities and colleges. Development work is followed up and evaluated by the Centre for Evaluation Research (UCER) at Umeå University.

The Knowledge Foundation

The Knowledge Foundation works to enhance Sweden's competitiveness by supporting:

- research at new universities and university colleges
- competence development in industry
- the promotion of IT in schools, education and health care
- the restructuring of industrial research institutes

The Foundation was established in 1994. In the first ten years, the foundation has invested almost five billion Swedish kronor in projects related to research, competence development in industry and IT development in the schools. During this time, new working methods have been designed, with the foundation functioning as an initiator, financial backer and source of knowledge for research projects at new universities and university colleges. The foundation is an engine and a creator of contacts, working in partnership with the academic community, business community and public sector. Their work has resulted in many new networks of researchers and entrepreneurs, product developers, innovators, teachers, health care workers, politicians and civil servants.

The Knowledge Foundation has taken the initiative in developing a national postgraduate programme on learning and IT, LearnIT. In LearnIT, research is being conducted in how IT affects learning, knowledge formation and education at the societal, organisational and individual level. Gothenburg University is hosting the programme, which runs from 2000-2007 and whose goal is the long-term development of knowledge about learning and IT.

Laws and politics

ICT policy

Teacher training policy & ICT & TT policy

- Who is responsible for TT?
- Are there obligations for HE teachers to follow teacher training (initial, continuous)?

In the government bill 2001 02:15 "Reforms in higher education – a more open system", the Ministry of Education and Science emphasized the need for pedagogical reform in Higher Education, promoting

the use of ICT in education as a means to expand recruitment to universities and university colleges and open new paths to higher education, allocating 2.65 million SEK to higher educational institutions to implement courses in teaching methods.

In Sweden, the responsibility for teacher training lies with the individual universities and university colleges; there is no national strategy for promoting pedagogical competency or the competencies needed in the use of technology in education.

The majority of Swedish Higher Education institutions have units which offer in-service training in teaching methods, and require all new staff to participate in courses of 4-6 weeks in duration. Further, it is proposed that pedagogical training for teachers be extended to 10 weeks. These courses generally do not lead to an academic qualification. The provision of training in ICT skills is frequently carried out by special units within the universities and is seldom integrated with training in teaching methodology.

- Advantages to be trained with ICT: Money, Career, Recognition
 - Is pedagogical performance taken into account in the evolution of a teacher's career?
 - What strategies for rewarding teachers other than remuneration can be implemented (peer recognition, prizes, 'coffee and cakes',...)?

Pedagogical performance is unlikely to advance the career of individual teachers although it is an advantage for university teachers to have taken part in pedagogical training when applying for a new post. In general, there are no strategies for rewarding teachers.

Background information

- Teacher's status and missions
 - Can a teacher be paid for online teaching?
 - Does a teacher have a minimal number of face-to-face teaching hours to do?
 - Can a teacher receive author rights for multimedia production?

In Sweden, university teachers can freely choose the method they use in teaching. They can also choose whether they use ICT or not in campus-based courses or flexible, distance courses. Online teaching is something which teachers can do voluntarily and they are not paid any extra money for doing so.

As a general rule, the teacher's rights as an author are safeguarded by legislation "lärarundantaget". However, when working for an educational institution, it is becoming more common to have an agreement between the author and the institution to define the conditions for the usage of web-based teaching material.

Actions and Infrastructures

- National/regional actions
 - Is there any national, regional or local initiative to stimulate uptake of e-learning?

The Government Bill 2001/02:4, "A policy for growth and viability throughout Sweden", presented Government proposals for a new policy area including the whole country; *the Regional Development Policy*. The policy's overall objective is "Well functioning and sustainable local labour market regions with an acceptable level of service in all parts of the country".

A Regional growth Programme, based on current regional growth agreements, formed the basis for subsequent activities. The EU structural funds also comprised an important part of the policy as well as a number of measures to promote development. The measures aimed to achieve stronger regions and local authorities, increased knowledge and skills, greater enterprise and developed

entrepreneurship, local growth and attractive life environments as well as an acceptable level of service.

Knowledge and skills are very important for sustainable local and regional development. Education has considerable bearing on an individual's possibility to keep a job, influence the direction of work and for her/his personal development. In the Bill "An open university" SOU 2004/29, the Government presents proposals aimed at making higher education more accessible to new groups of students. The Swedish Government's aim is that 50 percent of each age group up to the age of 25 should be enrolled in higher education. The proposed model is to use distance education through the Swedish Net University combined with the support of learning centres in the local communities. Two examples of education in rural areas are the nursing programme and the dispensing chemists programme, developed and run by Umeå University. The following measures are proposed to create favourable educational environments in all areas of the country:

- Distance learning should be developed so that higher education is easily accessible throughout the country.
- Cooperation between collaborating universities, colleges and local authorities is to be stimulated.
- New high education programmes are to be developed in order to broaden recruitment to higher education and thereby satisfy future needs of a competent labour force.
- A special development subsidy to local authorities to create local learning centres is to be implemented.

The combination of a Swedish Net University and of local study centres creates great hopes of increasing the number of participants in higher education. The state institutions allocated 20 million Swedish kronor in 2004 to support the creation of more study centres in the country. Another big investment in higher education is 120 million Swedish kronor to projects with the aim of widening social and gender-related recruitment. The national support also includes 150 million Swedish kronor for three years to stimulate regional co-operation between universities and local authorities. Up to now, the Commission for Regional Cooperation on Higher Education has financed about 70 projects. The knowledge accumulated in these projects will be important for viewing education as a strategic question with strong connection to prosperous regional and economic development.

References

Swedish National Agency for Higher Education: <http://english.hsv.se/>

Swedish Agency for Networks and Cooperation in Higher Education:
<http://www.myndigheten.netuniversity.se/en>

The Council for the Renewal of Higher Education: http://rhu.se/index_eng.htm

The Knowledge Foundation: <http://www.kks.se/templates/StandardPage.aspx?id=84>