

Introduction

The Swedish system of higher education has been formally a unified system since the higher education reforms of 1977. In spite of being a unified system, there are a number of different types of institutions, including universities, university colleges, and specialised institutions. The university sector consists of twelve universities and three specialised institutions of higher education. In total there are more than 45 different institutions (the total number has been dropping because a number of health science institutions have been merged with other institutions). The private sector consists of twelve institutions: one university, one specialised institution, one university college and one smaller non-university institutions.

In 1977 a major reform of higher education unified the system. In 1993 a second major reform of the higher education sector was undertaken. The 1993 reforms introduced a system of credits and standardised degrees. The Ministry of Education and Science is responsible for making policy for the whole higher education sector.

Input

Around a third of the total number of students in Sweden study at university colleges (defined here as including arts colleges and colleges of health). This percentage has remained fairly stable over the past 15 years (see table 11.1).

Table 11.1: Number of students studying at universities and university colleges 1987-1998

	1987	1988	1990	1992	1994	1995	1996	1997	1998
Universities	129,655	129,351	137,386	160,652	177,422	186,485	193,744	198,863	238,591
University colleges*	56,914	60,187	68,103	85,802	98,491	106,737	114,162	121,072	83,831
<i>Percentage</i>									
Universities	69%	68%	67%	65%	64%	64%	63%	62%	74%
University colleges*	31%	32%	33%	35%	36%	36%	37%	38%	26%

Source: Higher Education Monitor 2000

* includes university colleges, arts colleges and colleges of health

Upper secondary school lasts three years. Both vocational and academic tracks exist (there are around 16 altogether), but all of them qualify for higher education.

Entrance to all higher education programmes requires either: 1) completion of upper secondary school (or the equivalent: adult secondary school, folk high school, foreign secondary school), or 2) having reached the age of 25 and having four years of work experience, and having a high enough score on the Swedish Scholastic Aptitude Test (SSAT). In addition, all entrants must have proficiency in Swedish and English corresponding to the end level of upper secondary school. The two different ways of gaining entrance to higher education were formerly two separate quota systems, but since 1991 upper secondary school graduates can also gain admission by taking the SSAT. This change to the regulations was made in order to increase the number of entrants coming directly from upper secondary school, as the government felt that the competition for graduates of upper secondary school had become too fierce. There are no differences between types of institutions concerning the national admissions criteria.

In addition to these general requirements, students must meet specific requirements which vary by programme. For professional degrees (see below) there are standardised requirements which are determined by the National Agency for Higher Education. Specific requirements for all other types of programmes are determined by the individual institutions.

Since 1993 institutions have had the right to select students themselves, using the national qualification standards, and specific selection criteria determined by the institutions themselves.

Tuition is not charged at Swedish institutions of higher education. Students at the undergraduate level (considered to include Master's degrees in Sweden) receive grants from the state. Postgraduate studies must be financed through outside sources or through the university's research funds (Klemperer, 1999).

Structural characteristics

Types and levels of degrees

Higher education degrees in Sweden are divided into two types (general and professional degrees) and two levels (initial and post-initial). There are three types of general degrees (Diploma, two years; Bachelor's, three years; and Master's, four years) and a variety of professional degrees (1 to 5 1/2 years), all of which are considered to be initial degrees in Sweden. Professional degrees are more professionally oriented and are the only type of degrees available in some subject areas (such as engineering and medicine). Around half of the students are enrolled in professional programmes and about half are enrolled in general degree programmes. There are two types of post-initial degrees: licentiate (two years) and doctoral (four years) degrees.

There are only a few differences between universities and university colleges with regard to the types of initial degrees offered. Both types of institutions award Diplomas and Bachelor's degrees, and universities and some university

colleges award Master's degrees. A new type of more professionally-oriented Master's degree (as opposed to the current academically-oriented degrees which prepare students for postgraduate studies) was proposed in 1999 by the National Agency for Higher Education (see also below).

As explained, there are few differences between the sectors in terms of types of initial degrees that are awarded. In addition, the official (Swedish) translations of both university college and university degree titles into English use the term 'University (Diploma/Bachelor's/etc.)' (Zanotti and Dickey, 1995). There are, however, distinctions between the sectors at the postgraduate level, as university colleges generally do not have the right to award postgraduate degrees (licentiate and doctoral degrees). A few university colleges have recently gained this right (see current trends section). It must be stressed that the distinction between the sectors is not totally clear-cut, as there are cases in which postgraduate students may be registered (and carry out most of the work) at university colleges and obtain their degrees from a co-operating university (National Agency for Higher Education, 1996).

One may consider Diploma and Bachelor's degrees as intermediary qualifications, as students generally have the possibility of continuing their education upon completion of these degrees (although they must be accepted into higher level programmes). The degree to which a qualification is considered an intermediary step, however, depends on the field. For example, in social sciences and law the Diploma degree can be considered an intermediary qualification, but in other fields these degrees may be considered final qualifications. Similarly, depending on the field, in some cases the Master's degree may be considered an initial degree (if shorter programmes do not exist in that field). In order to examine to what an extent the different degrees actually function as intermediate qualifications, one must first examine the destinations of graduates of these programmes. Unfortunately, this information is currently not available (Schrier and Kaiser, 1998; Zanotti and Dickey, 1995).

Professional versus academic programmes

In many other countries the division of higher education into university and non-university sectors is based on an academic versus professional orientation of the institutions. This distinction is not made in Sweden. Universities offer both academically and professionally-oriented degrees. Furthermore, university colleges have started to offer Master's degrees (which mainly lead to post-doctoral education at this point) and some co-operate with universities in offering postgraduate education.

Many programmes that are 'professionally'-oriented (for example hotel and restaurant degrees) are offered by universities, and a wide range of degrees in various fields are offered both at university colleges and universities, including teacher training, library science, and nursing. Some initial degrees, however, such as in law, medicine and dentistry, are only offered at institutions in the university sector (Zanotti and Dickey, 1995). The general lack of distinction along academic/professional lines may in part be due to the Higher Education Act of 1977 which aimed to create more equality between the different types of institutions and promoted co-operation (Klemperer, 1999). In

addition, this legislation stressed the necessity for all initial higher education programmes (in all types of institutions) to have links with working life (Fritzell, 1998).

There are no clear-cut distinctions between universities and university colleges with regard to programmes that include a period of practical work or the length of this period. At the national level, only teaching and medical programmes are required to include a practical period of work. For programmes in other subjects, institutions may decide for themselves whether or not to include a practical period. Many programmes (both general and professional) require students to complete a practical period, but there are no statistics available on this (Boezeroy *et al.*, 1998).

Research function

Traditionally there was a division between the two higher education sectors in terms of the research function. The research function was traditionally limited to universities and specialised institutions with permanent research funding. With the recent granting of university status to three university colleges and the right to receive research funds for particular disciplines to two other university colleges, it can be said that in this respect there has been a blurring of the sectors.

In terms of the breadth of educational programme offerings there is also no clear-cut distinction between universities and university colleges. Many university colleges are much smaller institutions than universities, and many (but not all) traditionally specialised in particular fields of study. However, there has been a trend toward merging some of the single-discipline institutions (such as many of the former health colleges) with either other university colleges or with universities (National Agency for Higher Education, 1999a). In addition, there are some specialised institutions (such as the Karolinska Institute and the Stockholm Institute of Education) which are considered to be part of the university sector, due to the fact that they receive permanent research funding and grant postgraduate degrees.

Co-operation between the sectors

There is co-operation between the sectors in terms of both the research and teaching functions. Co-operation between the different types of institutions in terms of teaching is encouraged, but not regulated, by the state. There is a long history of co-operative arrangements between individual institutions. As was mentioned above, legislation passed in 1977 encouraged co-operation. One example of co-operation is in terms of (some) engineering programmes where the first two years of the programme may be taken at a university college and the final part at a university. In some cases the majority of the work will be done at a university college and the degree certificate will be issued by a university. In the case of medical education, it is possible to transfer from a university health college into a regular medical programme at a university. Students wishing to continue their studies at a university must take a year of bridging courses and practical experience before they will be admitted. The total duration of the education taken on this track is around 6 years, as opposed to 5.5 years if the whole course is completed at a university (Zanotti and Dickey, 1995).

Higher education institutions set their own admissions requirements, and therefore there is no national framework regulating transfers between different types of institutions. There are examples of particular Master's programmes that will accept graduates with Bachelor's degrees from both universities and university colleges. It is important to point out, however, that this varies greatly from field to field, and that some Master's degrees are considered 'first degrees' in the sense that there are no Bachelor's degrees offered in some fields, and in these cases the Master's degree is a continuous 4-year degree (some initial professional degrees are even longer).

Other system characteristics

Finance

There are no differences between universities and university colleges in terms of how teaching funds are awarded. Since 1993 institutional grants have been based on three-year contracts between the Ministry of Education and Science and the institutions. The teaching portion of these contracts is based largely on the number of active students (determined on the basis of the number of study credits achieved), and the number of degrees which are awarded. The government sets the maximum sum which will be awarded.

There are differences between universities and university colleges in terms of basic research funding. Only two university colleges have the right to grant postgraduate degrees (in particular fields) and to receive permanent research funding. This is a recent development (since 1999). The rest of the university colleges do not receive permanent funding for research, and must rely on attracting external funding in order to be able to carry out research.

A higher percentage of the teaching staff at universities has earned a PhD than teaching staff of the university colleges. There are, however, no national statistics published about this.

As mentioned above, except for a few institutions, university colleges do not receive permanent funding for research and do not have the right to grant postgraduate degrees. All university colleges do, however, carry out some research, which is supported by external sources of funding (both public and private sources). University colleges have the right to apply for public research funding (such as from the research councils) along with universities and other research institutes. Certainly the universities receive a greater percentage of this funding than do the university colleges.

Quality assurance

The National Agency for Higher Education is responsible for carrying out a quality audit of all of the higher education institutions once every three years. In addition to these institutional audits, the National Agency for Higher Education is also responsible for making quality assessments of particular disciplines (both teaching and research). Because in many cases similar programmes are offered at universities, university colleges and specialised institutions, these disciplinary assessments cover all of the institutions which are active in a

given field. Up to now there is not a unified approach to quality assessment work – a variety of methods and designs of quality systems are being used. The audit processes seek to examine education and research in relationship to the particular context and circumstances of each individual institution (Swedish Ministry of Education and Science, 1992; National Agency for Higher Education, 2000).

Output

No recent information on labour market placements of graduates is available; however, a study of graduate destinations was undertaken in 1997. On the basis of this study it is possible to conclude that the majority (72-74%) of graduates with degrees of three years or longer entered the labour market. A much smaller percentage (18-19%) continued their studies or combined working with continuing studies. Unfortunately on the basis of this study it is not possible to distinguish between graduates with Bachelor's and with Master's degrees, nor between degrees granted by university colleges or universities (Statistics Sweden, 1997).

Developments

Historical background

Some of the institutions that later became university colleges were founded as specialised institutions for natural sciences at the end of the nineteenth century (Eurydice, 2000). During the second half of the 1960s some universities established branches in other regions of Sweden, and some of these eventually became university colleges. Many other university colleges were founded during the expansion of the higher education sector following the 1977 reforms. The main reason for founding these institutions was in order to expand the geographic accessibility to higher education. During the same period, the university college sector of higher education grew through the inclusion of many institutions which were formally not part of the higher education sector, such as in the areas of teacher training and nursing education (National Agency for Higher Education, 1999). Four new university colleges were founded in the 1980s and early 1990s (Fritzell, 1998).

The latest major reforms of the system (1993) – apart from the recent 'upgrading' of some university colleges, discussed above – introduced a system of credits and standard degrees. It is not known to what a degree these changes have led to an increase in students transferring from one type of institution into another, but the increased transparency should make more mobility possible within the higher education system.

Recent developments

Interesting recent developments have included the granting (1999) of university status to three university colleges and the granting of special status to two

university colleges allowing them to grant postgraduate degrees in particular fields, and to receive permanent research funding (National Agency for Higher Education, 1999). It can be said that these developments (in particular the latter) point to a certain blurring of the borders between the sectors.

Bologna declaration

Bachelor's degrees have traditionally existed at Swedish universities. More recent developments have involved Master's degrees. One of the reasons for introducing the Master's degree (in 1993) was to make the study programmes more compatible with Norwegian and Danish traditional initial degree programmes (which were somewhat longer than traditional Swedish degrees, Schrier and Kaiser, 1998).

A recent (1999) report released by the National Agency for Higher Education describes the Master's degree as having a rather unclear status in Sweden. One of the reasons for this is that these degrees primarily serve to prepare students for postgraduate studies, but at the same time they are not always required for entrance into these programmes. In some cases students may be granted admission to postgraduate programmes with Bachelor's degrees. Students claim that the Master's degree lacks a clear status in the labour market, although they recognise its usefulness in international contexts. The National Agency reports that various higher education institutions have expressed interest in introducing a new type of diversified Master's degree which would aim to be more relevant for the labour market (National Agency for Higher Education, 1999b).

In 1999 the National Agency for Higher Education proposed that a new type of Master's degree should be developed. This Master's degree should be more professionally-oriented, as opposed to the current degrees which are largely academically-oriented and mostly aim to prepare students for postgraduate studies. The National Agency proposes that these new degrees should open up possibilities for professionally active people who have previously taken a first degree. In addition, the new degrees should offer opportunities for foreign students to study in Sweden. (National Agency for Higher Education, 1999c)

Conclusion

In comparison with the Dutch situation, it is clear that there are not as many distinctions between different types of higher education institutions in the Swedish system. Although different types of institutions exist within higher education, the differences between them are not as great as in many other systems. As was mentioned, traditionally the main distinction between universities and university colleges was the research function and the right to grant postgraduate degrees (these were the domain of universities). In recent years, however, there have been some blurring of these differences, as some university colleges have started receiving permanent funding for research and have gained the right to grant postgraduate degrees. It must be mentioned, however, that co-operation between different types of institutions has been a characteristic of the system for a long time. In addition, an interesting recent development has been the granting of university status to a few university colleges.