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A Case Study

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HIGHER EDUCATION IN SCANDINAVIA

Jørgen Lerche Nielsen and Lars Birch Andreasen

Introduction

Higher education systems around the world have been undergoing fundamental changes through the last 50 years from more narrow self-sustaining universities for the elite and into mass universities, where new groups of students have been recruited and the number of students enrolled has increased dramatically. As the general level of education in society is growing, universities are adjusting to the role of being a mass educational institution. Universities have been challenged on how to cope with various external pressures, such as forces of globalization and international markets, increased national and international competition for students and research grants, increased pressure to become more efficient economically and regarding students' length of studies. These various pressures can be seen as expressions of national policy changes from more democratic governance towards new public management principles. In this chapter we will examine how higher education systems in Scandinavia are developing in relation to these challenges. To what extent has the democratic tradition had an impact on the educational systems, and what possible futures can be envisioned?

The area of Scandinavia refers to the three North European countries of Norway, Denmark, and Sweden, which in many ways have a shared history and relatively similar development of welfare societies, where education plays a central role. Another term often used is the Nordic countries, referring in addition to the Scandinavian countries also to Finland and Iceland. In this chapter we will, however, focus on Scandinavia.

Major Trends and Structural Changes in Scandinavia

The oldest universities in Europe were founded in Bologna 1088 and in Paris 1208. In Scandinavia Uppsala University, Sweden, was established 1477, and University of Copenhagen, Denmark, was established two years later 1479. The "modern" university can be traced back to the beginning of the 19th century with the German philosopher, linguist and educator Wilhelm von Humboldt, who founded Berlin University. The Humboldtian model, which became influential in Scandinavia, underlined the unity between research and teaching, and stressed the process of discovery of knowledge. Thus, lectures, seminars, laboratory courses, and excursions were seen as supporting students' independent pursuit of understanding and knowledge, more than means of transmitting knowledge (Dysthe and Webler, 2010). Humboldt envisioned university education as a student-centered activity of research. "The university teacher is thus no longer a teacher and the student is no longer a pupil. Instead the student conducts research on his own behalf and the professor supervises his research and supports him in it" (Humboldt, 1809, cited by Clark, 2009, p. 333). Professors and students should together embark on research and thorough investigations, with a purpose of improving society and teaching critical thinking and research.

The underlying value of professional autonomy has been an important feature of the

Humboldtian university model. This university organization builds on a collegial perspective stressing consensus, autonomy, and democracy. The faculty has a great deal of academic autonomy as long as it possesses the required competence and qualifications (Fägerlind and Strömqvist, 2004, p. 20).

Till the beginning of 1970s, university departments were usually organized with few professors carrying out the decisive decisions, but the youth and student revolt in 1968 had a strong impact on the organization of higher education in Scandinavia. In Denmark, the organized student movement succeeded in contributing to major changes regarding content, form and organization of the universities. As a consequence, the Danish University Act of 1972 introduced election among faculty, students and administrative staff for participating in the decision-making bodies of the university. Also heads of departments and study programs, deans and rectors (university presidents) were elected by the employees and students.

The resulting changes led to a focus on practical and professional application of the content of studies. At some study programs, the organization of teaching and learning processes were no longer directed at individual assignments on fixed questions, but could involve groups of students collaboratively writing projects of up to 100 pages, applying theories and methods from a variety of disciplines to investigate a certain problem. Criticism of the traditional examination and grading system resulted in new ways of assessment and in some places students were examined in groups, where they, on the basis of their written project report, made an oral presentation and the examination was undertaken as an illuminating dialogue.

This development was in a way a combination of interests of various actors. From the students' and reform movement's point of view, the changes led towards more focus on student-led project work, cross-disciplinarity, and improved societal relevance. Parallel with this, the government and ministries had a wish to establish more flexibility and efficiency in the university programs (Christiansen et al., 2013, p. 22), which was also one of the implications of the reform development.

During the 1980s and 1990s the elected university bodies and the universities as a whole were criticized for being ponderous organizations overloaded with demands from many stakeholders and incapable of responding quickly, efficiently and flexibly to changing social and industrial demands. New lines of authority were modelled upon those found in corporate structures, mixing traditional academic values with managerial ones (Fägerlind and Strömqvist, 2004, p. 21). This led in Denmark to the University Act of 2003, which abolished the democratic collegiate system and replaced it with professional hired leaders and governing boards with majority of external representatives from industry, business and public and private institutions. Another contested change took place in 2006, where the center-right government issued a law that prohibited group exams. Later, in 2012, a new center-left government reversed this law, and it is now up to the educational institutions themselves to decide the form of assessment (Andreasen and Nielsen, 2013, p. 218).

With the University Act of 2003 grew a new kind of institutional autonomy. The state would not govern higher education directly, but rather indirectly through negotiations and through rewarding best practices. Still, centralized decision-making is maintained in many ways, e.g. through performance contracts and control of accreditation of programs, and autonomy is therefore limited (Rasmussen, 2014).

The recent reform agenda for management and financing of higher education institutions is not unique for Scandinavia. Similar patterns seem to appear in many countries worldwide. In Europe, universities have become more autonomous from the state in many ways. At the same time, increasing pressure for social responsibility and accountability has brought about another type of state control. Thus, the decentralization of authority from the central government directly to institutions shall be seen in combination with more direct links

and contracts between the ministries and higher education institutions. New agencies or councils have been created for the purpose of quality control and coordination, and the financing of higher education is changing from basic funding towards performance-based funding.

The Scandinavian welfare model has given high priority to policies regarding health, social welfare and education; and this has been considered by economists and social scientists to promote economic growth. But a shift in paradigms has taken place with more emphasis on private actors, and it has been stressed by governmentally appointed commissions such as the Danish Productivity Commission (2013) and by OECD (2014) that funds for social welfare and education are not limitless. This is the landscape in which the current developments in higher education shall be seen.

Diversification of Higher Education Institutions

Higher education in Scandinavia has a long history, but from the first establishment of universities and until today, institutions of higher education have changed considerably. One period of change took place in the 1960s with a dramatic rise in the number of students applying for university studies and a resulting growth of the existing universities and establishment of new universities. In the political landscape of societal transitions in the 1960s and 1970s, the expansion of higher education institutions served several purposes. In the Scandinavian countries, the locations of new institutions of higher education were often decided partly in order to create regional development and growth.

After a period of regional diversification and growth in the number of higher education institutions in the 1960s and 1970s, the number of educational institutions and programs became more stable. In the beginning of the 2000s, we can notice in the Scandinavian countries a tendency towards merging processes and fusions of institutions into fewer, more centrally governed ones, at times with local branches.

In Sweden, Norway as well as in Denmark, a distinction exists between universities and university colleges. In all three countries, universities have the purpose of conducting research and offering long-cycle tertiary education. The term "university college", however, covers different areas in the three countries: In Norway and Sweden, university colleges have a longer history and may not only provide medium-cycle profession-based education, but may partly also cover master and PhD. Some university colleges in Sweden and Norway are in a transition phase where they expand their research activities and some have become accredited as universities. In Denmark, on the other hand, "university colleges" are of a relatively new date, established in 2008 as "professionshøjskoler" merging several local and regional educational institutions, and with the main task of providing medium-cycle higher education at the bachelor level for professions such as teachers, kindergarten/pre-school teachers, nurses, and social workers (called a "professional bachelor"). Therefore, university colleges in the three Scandinavian countries may cover different tasks.

Higher Education Institutions in Denmark

In Denmark, the educational system is organized in two parallel strands; an ordinary education system and a parallel system covering adult and continuing education, where the educational levels of the two systems are directly comparable.

The ordinary educational system consists of the basic school, youth education, and higher education. Higher education covers three different types of programs: Short-cycle programs of $1\frac{1}{2}$ - $2\frac{1}{2}$ years at vocational/business colleges ("erhvervsakademier"), medium-cycle programs of 3-4 years at university colleges ("professionshøjskoler") leading to a

diploma or a professional bachelor degree, and long-cycle programs of 5 years at universities, usually through a 3-year university bachelor followed by a 2-year master's degree (*candidatus*) (Schmidt, 2006, p. 522). The various types of education in the ordinary system do not require tuition payment.

A parallel system of lifelong learning makes it possible for people having obtained some years of work experience after having left the mainline education system, to re-enter higher education developing their qualifications further at professional diploma and master levels. The educational offers of this parallel system are typically financed through a combination of tuition fees from participants and subsidies from the state (Buhl and Andreasen, 2010).

In Denmark, an expansion of the number of educational institutions took place during the 1960s and 1970s, often contributing to the local and regional development. Until the late 1960s, there were only two universities in Denmark - in Copenhagen and in Aarhus - which at that time grew significantly due to the rapidly growing number of students. In order to cope with the continuing rise in student intake, during 1967-75 three new universities were founded - in Odense, Roskilde and Aalborg. These universities were founded with the intentions of giving access to education also in geographically remote places and supporting regional development, but also with the intention of experimenting pedagogically and modernizing the university traditions (Olesen and Jensen, 1999). Two of the universities - in Roskilde and in Aalborg - explicitly favored a project-organized and problem-based learning approach.

All five above-mentioned institutions were established as multi-faculty universities. In the 1990s, a number of single-faculty universities were established, building on already existing institutions of higher education with a specialized focus in technical science, business, pharmaceutics, or education.

Since the millennium, the former multitude of different educational institutions have merged and are now forming fewer, often regionally based, centers, each offering a number of specializations at various locations. Before the Millennium, there were 150 different schools, colleges and seminaries offering short- and medium-cycle programs (Schmidt, 2006, p. 522). In the beginning of the 2000's 23 "Centers for higher education" were formed, some covering all medium-cycle programs in a definite geographical area, others covering only specific programs. In 2008, these 23 centers were further merged into only 7 regionally based "professionshøjskoler", in English translated into "university colleges". Parallel with this, the providers of short-cycle programs have merged into 9 business colleges, regionally based around the country.

Also regarding universities fusions have taken place. During 2006-07, 12 universities and 9 research institutions merged into 8 universities in Denmark. 5 of these are multi-faculty universities and 3 are single-faculty universities covering business, technical science, and information technology. Parallel with this centralization, some of the universities have established branches in various parts of the country.

The rationale behind the fusions of educational institutions has been to create stronger entities, improve quality as well as efficiency and international strength, but has also been expressed as a wish to establish better possibilities for cross-disciplinary cooperation, joint teaching activities, and knowledge sharing. Whether the fusions have led the development in this direction, are however yet to be seen.

Higher Education Institutions in Sweden

The universities of Sweden were originally founded as places for education of civil servants for the public administration (Nilsson, 2006, p. 46). In Sweden, during the 1960s and through

the 1980s, there has also been a regionalization process of the universities. This first happened by locating some of the existing universities' activities in regionally-based branches, and later through providing these branches full independence as universities in their own right. The same development towards regional coverage took place regarding medium-cycle programs, as the Swedish university college reform in 1977 ensured that each of the approximately twenty regions of Sweden should have located at least one higher education institution (Hedin, 2009, p. 16). In 2013, there are 14 public universities, three independent higher educational institutions, and 20 public university colleges in Sweden (Swedish Higher Education Authority, 2013, p. 16).

Higher Education Institutions in Norway

The first university of Norway was established in Oslo in 1811, while the country was still in union with Denmark. The second university, in Bergen, opened in 1946, just after the Second World War (Nilsson, 2006, p. 30-31). During the last fifty years, higher education in Norway has developed through three waves of reform. In the 1960s the right to nine years of schooling was decided, and a reform of the high school level was introduced, paving the way for more people entering higher education (Nilsson, 2006, p. 31).

In Norway, as in the other Scandinavian countries, the expansion of educational institutions from 1960 and onwards was at the same time a regional development process to develop areas with previously only few educational institutions. In Norway, a new kind of higher education institution - regional specialized public colleges - was established during the 1970s and 1980s (Hedin, 2009, p. 15). In the educational institutional reforms of the 1990s, these almost 100 colleges and other independent higher education institutions were merged into 26 university colleges, each covering a larger regional area. In the late 2000s a further merging of institutions is happening, which will reduce the direct presence of educational institutions in several regions (Hedin, 2009, p. 16). In 2014, there are eight universities, eight specialized institutions at university level, and 19 university colleges in Norway (Government of Norway, 2014).

Across the Scandinavian countries, there has throughout the 20th century been a diversification and a growth in the number of educational institutions at various levels, often based regionally, and providing foundation for local and regional development. In the last twenty years, there has been an opposite tendency of centralization through closures and fusions of existing institutions.

Affordability

In the Scandinavian countries, higher education is considered a public good, and it is generally free of charge to enter and participate in a higher education program. With equal rights to education as a central political goal, systems of financial support for students were developed after the Second World War. E.g., in Norway in 1948 a State Education Loan Fund was established to give all young people an opportunity for education irrespectively of social background, gender or residence (Nilsson, 2006, p. 31).

In Sweden higher education has been free of charge for both Swedish students and those from other countries, but since June 2010 citizens of countries outside Europe have to pay an application fee and tuition fees for higher education courses and programs. The higher education institutions are required to charge tuition fees that cover their costs in full for these students (Swedish Higher Education Authority, 2013, p. 20). The same conditions were implemented in Denmark in 2006. Norway is one of the few countries where higher education is free, regardless of citizenship. However, recently the Conservative party, which

is now in government, has contested this policy (Grove, 2011).

Beside the ordinary educational system, which is free, Denmark has as mentioned a parallel education system with diploma and master's programs directed mainly towards people in jobs. These programs are organized according to the Act on Open Education, and participants are paying tuition fees to cover parts of the educational costs.

Financial Support for Students

The Scandinavian countries have systems of financial support for students, which compared with most countries are at a relatively high level. In Denmark grants for students are said to be the highest in the world, twice as high as in Norway, and three times higher than in Sweden (The Danish Productivity Commission, 2013, p. 15). In Sweden two thirds of the support is state-financed loans with low interest and one third is a grant portion (Swedish Higher Education Authority, 2013, p. 20). Although Scandinavian universities do not charge tuition fees, and even though Scandinavian student welfare is relatively generous, most students need to work to support themselves. They typically leave home when they enter tertiary study and must pay for their own accommodation. In other OECD countries, up to three-quarters of students continue to live with their parents during tertiary studies (Dobson, 2010).

One of the voices in the debate on higher education belongs to OECD, who in its Economic Country Surveys regularly publishes analyses and recommendations on what reforms and political actions are needed. OECD's recommendations for Denmark, published in January 2014, focus on introduction of tuition fees for higher education, and on reforming the study grant system in favor of programs with higher expected employment rates and in favor of having students complete their education faster (OECD, 2014, p. 95-96). The Danish Productivity Commission (2013, p. 21) has similar recommendations of introducing "a certain" amount of tuition fee, especially in relation to programs with lower job prospects. These voices are led by an economic rationality that represents a break with the hitherto welfare state-oriented organization of higher education. The current Danish center-left government seems to be open to much of this criticism of the present state of the system of higher education. However, the responsible minister points out that introducing tuition fees is not on the current agenda. A reform of the study grant system seems to be more likely.

Financing Higher Education Institutions

Scandinavian countries have a strong commitment of public resources to higher education. In Denmark, Sweden and Norway, public resources devoted to higher education represented 1.8, 1.6, and 1.4 percent of GDP in 2012, as shown in figure 1. This relatively high level in part reflects traditions of universality and commitment to social welfare in Scandinavia (Hauptman and Kim, 2009, p. 10). As can be seen, private resources to higher education represent a marginal part in Scandinavia, which is in contrast to USA and South Korea, where private funding is dominant.

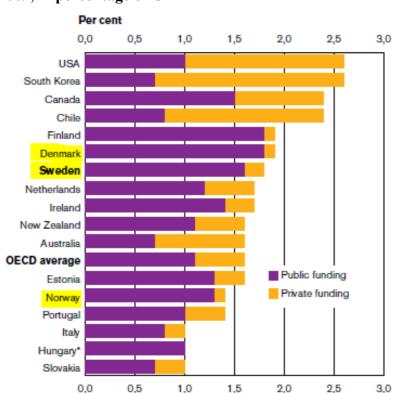


Figure 1. Public and private investment in higher education in selected OECD countries 2009, in percentage of GDP

(Adapted from Swedish Higher Education Authority, 2013, p. 10)

The public support for higher education institutions in Denmark takes place partly through relatively fixed yearly allocation of funds for research and for basic administration, while the funds for educational activities are allocated through a performance-based model. This model is called the taximeter principle (Rasmussen, 2014), and depends on the actual number of students that pass exams. A growing part of the research allocations are furthermore directed from basic funding to allocation through performance-based indicators.

In Sweden, after incentive reforms, the direct funding for research and education is based mainly on past allocations, but since 2009, 10 percent of the funding and new resources are allocated on the basis of quality indicators as publications, citations, and research funding from external sources (Swedish Higher Education Authority, 2013, p. 17).

Accessibility

In principle all citizens in the Scandinavian countries have the opportunity to access higher education, provided that they meet the requirements for admission, which are often defined as having completed high school. In some cases, specific courses or combination of courses are demanded.

Even though higher education in the Scandinavian countries was free of tuition fees, university education after the Second World War was only attended by a small percentage, as only few fulfilled the requirements for admission. A change to this occurred in Norway not before the late 1950s (Nilsson, 2006, p. 31). Looking at the number of possible applicants for higher education, the same tendency can be seen in Denmark. As shown in figure 2, in 1945 only 5 percent of young people in Denmark completed high school; thus, the numbers of students entering higher education were equally low (Statistical Agency of Denmark, 2008, p.

10). From the end of the Second World War until today, a massive expansion of the number of students has taken place. In 1972 the compulsory schooling in Denmark was expanded from seven to nine years. This led to a major growth in the 1970s and onwards, and the tendency towards that the majority obtains a high school education has continued.

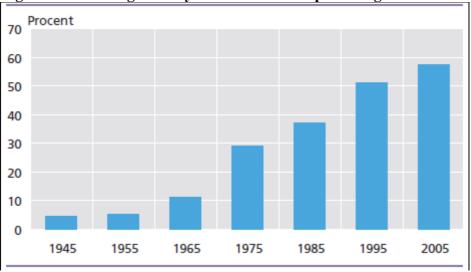


Figure 2. Percentage of 19-year-olds with completed high school education

(Statistical Agency of Denmark, 2008, p. 10)

When the influx of students grew significantly after the 1960s, beyond the capacity of the existing as well as the newly established universities, and the public expenses grew correspondingly, the former principle of open access was revised, and a system of restriction of access was introduced in order to limit the growing number of students, and to direct the students towards programs that were seen as useful or with better employment expectations. The restricted access was implemented in Denmark by giving a certain maximum of student intake on specific programs.

In Sweden, access is based mainly on school-leaving grades (Swedish Higher Education Authority, 2013, p. 20). In Denmark, access is also mainly based on the applicants' grades from their high school exams (called quota 1). In addition to this, 10-25 percent of the student intake is based on criteria specified by the institutions (called quota 2), which allow for individual assessments with regard to work experience, other education or study abroad.

The coherence between different areas of the educational system has recently become more open and flexible. It is now possible to get access to some of the master's programs at the universities if you have a professional bachelor from a university college. Earlier, this possibility did not exist, because the medium-cycle programs were not recognized as professional bachelor degrees. Therefore, as a student from a medium cycle program, you had to start all over again. Additionally, parallel educational opportunities have opened up in the form of diploma and master's programs through Open Education, where people can study part-time while still holding their positions in the private or public sector.

From the perspective of the educational researcher Martin Trow, educational systems can be classified into three ideal types: An educational system can be described as having *elite* access, if only a small percentage of the population obtains a higher education. If a share of 15 percent or more completes higher education, the educational system may be described as having *mass* access, meaning that it is generally considered as a straightforward thing to do for a middle class student to enter higher education. Furthermore, when over 50 percent of a population completes higher education, the educational system may, in the perspective of Trow, be described as having *universal* access, meaning that higher education is considered

an even more natural thing to enter for the majority of young people. The implication of this broadening of access is that university education needs to be structured in new ways (Trow, 2010, pp. 94-95).

According to the classification of Martin Trow (2010), the transition of Scandinavian higher education from elite access to mass access occurred in the 1960s, when a great mass of students were seeking further education in connection with the societal development from predominantly agricultural societies to more industrialized societies, with the need of a more skilled workforce. The rise in the number of students was further increased by the fact that the baby boomers, the big generation born in the years after the Second World War, had grown up and were able to apply for study. The change from mass access towards universal access to higher education is currently happening in the Scandinavian countries.

Participation

The overall tendency in Scandinavia as well as world-wide is that a growing number of people are attending higher education. Additionally, more people are obtaining a higher level of education. This general tendency of an increasing educational level has been particularly prevalent in two periods, the first in the 1960s and 1970s, and the second from 2000 till date.

Efforts have been taken to widen participation in higher education and include groups that traditionally did not participate, e.g. older students, or students from non-academic backgrounds. For the Social Democratic Party, which has been influential in all three Scandinavian countries, the goal of recruiting students from a variety of social, cultural and educational backgrounds to obtain more educational equity in society has been considered important as a democratic goal. Furthermore, the need for a highly qualified workforce in order to maintain the welfare state has also been considered a crucial factor behind the effort to widen participation. Even though the goal has not been fully achieved, an increasingly diverse group of students from more varied backgrounds than before, and at different life stages, is now found in Scandinavian higher education institutions (Fägerlind and Strömqvist, 2004, p. 245).

The share of the population entering and completing a program in higher education has been growing in all Scandinavian countries, with the actual level of Norway and Sweden a bit higher than Denmark. The level can be measured in many different ways; here, we will mainly refer to data collected by Eurostat - the statistical agency of the European Union - that measures the participation in higher education by analyzing what percentage of people in the age group 30 to 34 years have completed either a short-, medium-, or long-cycle higher education, that is, at least two years of tertiary education (Eurostat, 2014).

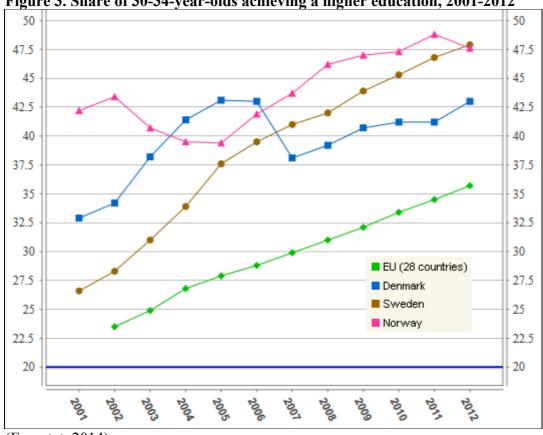


Figure 3. Share of 30-34-year-olds achieving a higher education, 2001-2012

(Eurostat, 2014)

Figure 3 shows generally a continuous growth in the share of the population achieving higher education, in the Scandinavian countries as well as in the European Union (EU). (The break in the graph of Denmark between 2006 and 2007 may be due to a change in methods of assessment.) The EU has a goal that the share of 30 to 34 year-olds with a completed higher education should in 2020 be at least 40 percent. Generally this goal is about to be achieved, as in the period from 2002 to 2012 the overall mean for the EU countries has moved from 23.5 percent to 35.7 percent. The Scandinavian countries have already exceeded the EU goal.

Another goal is set by the Danish government that in 2020, 60 percent of a youth cohort should complete a higher education. The difference between the Danish goal of 60 percent and the EU goal of 40 percent is partially due to the fact that the criteria behind measuring the numbers are different. The EU figures are calculated as the actual share of higher education among 30 to 34 year-olds. The Danish figures are calculated as the expected future educational level of today's 15 year-olds, based on register data and statistical projections. In Denmark in 2010, 54 percent of the 15 year-olds are expected to complete a higher education. This is a rise from 35 percent in 1990 (Ministry of Business and Growth, 2013, p. 57), and the goal of 60 percent thus seems to be within reach.

In figure 4 below, the share of students completing a short-cycle, medium-cycle and long-cycle higher education is visualized, showing a considerable growth especially in relation to long-cycle higher education.

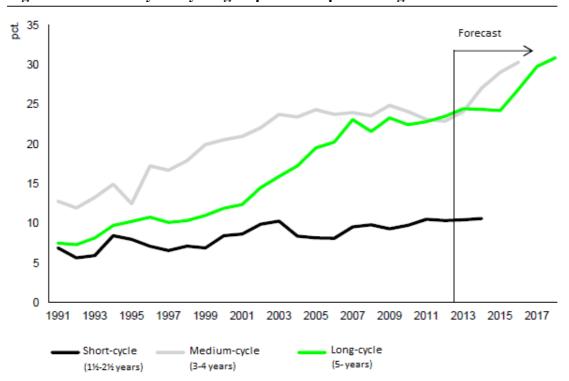


Figure 4. Share of a youth year group that completes a higher education

(Danish Productivity Commission, 2013, fig. 3.4, p. 35)

Another relevant aspect regarding participation is the balance between male and female students. Historically, educational systems have been male-dominated, but today there is globally a slight majority of female students. In Denmark in 1945, only 14 percent of the university graduates were female, while in 2005 the share has grown to 52 percent (Statistical Agency of Denmark, 2008, p. 9). In the Scandinavian countries, female students' share of the total student population of higher education has since 2000 been relatively stable. In 2011, in Denmark 57 percent, in Sweden 59 percent, and in Norway 60 percent of the higher education students were female. In science, mathematics, and computing programs, the share of female students in 2011 in Denmark was 35 percent, in Sweden 41 percent, and in Norway 35 percent (Eurostat, 2014).

Another tendency is that a growing number of students enroll in higher education directly or shortly after completing their qualifying degree. In Scandinavia students entering higher education have generally been older than students in most other countries, where higher education normally begins early after leaving high school. The difference between the age of higher education entrants in the various countries reflect social differences and differences in the educational systems, for instance the age at which high school education finishes. In Scandinavia, pupils normally leave high school at the age of 19, which is one of the reasons why higher education entrants are older than in many other countries. Higher education in Scandinavia is also characterized by a major element of lifelong learning (Swedish Higher Education Authority, 2013, p. 8). As shown in figure 5, there is a clear tendency that higher education entrants in Sweden are getting younger.

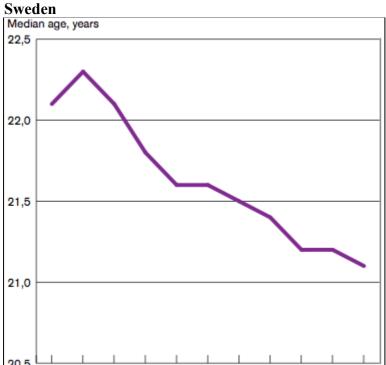


Figure 5. Median age of higher education entrants (without incoming students) in

2005/06 (Swedish Higher Education Authority, 2013, p. 26)

2003/04

In Denmark as well, young students are encouraged to enter higher education earlier. Since 2009 students can multiply their average grades from high school by 1.08 if they apply for higher education within two years of finishing high school. Thereby they will receive an 8 percent increase of their scores, so that they will more easily enter their program of choice.

2009/10

2011/12

2007/08

Danish students are also encouraged to complete their studies faster and a reform has been lined out in 2013 to increase the study efficiency and cut half a year of the time students take to complete their studies.

Quality

2001/02

Quality has become a key general theme for the Ministries of Education in all Scandinavian countries in the wake of the rapid expansion of the numbers of students (Andersen and Jakobsen, 2012, p. 24). In Sweden, for instance, the total number of students in 1950-55 was 20.000, while in 1999 the total enrolment was around 300.000, what Torsten Husén calls a process of massification (Husén, 1999, p. 1). How can the institutions guarantee quality in this situation? The challenge has been to secure quality while expanding quantity. According to Palle Rasmussen (2014), quality assessment was not an issue in Danish education prior to 1980. All institutions had to adhere to a fairly detailed set of official regulations, and this in combination with the professional judgment of the teaching staff was expected to uphold the quality.

Another way of upholding quality in the institutions of higher education happens through the continuous evaluations in the system of examination of students. In Scandinavia, university exams are generally organized not as questionnaires or multiple-choiceassignments with fixed answers, but through oral and written examinations, where the students are evaluated by two academics, an internal university professor and an external examiner. Each higher education program is connected to a board of external examiners, with members from other academic institutions as well as relevant businesses and organizations. The members of the boards of external examiners are continually renewed. Through this system of evaluating the students' results, the quality of higher education is continually contested.

In 1992 the Danish Ministry of Education established the Evaluation Center for Higher Education. The goal of the center was to undertake quality assessment of all study programs in higher education, to develop appropriate evaluation methods, to guide institutions in matters of quality development, and to compile national and international experiences on evaluation and quality development in higher education (Rasmussen, 2014). The director of the Evaluation Center has pointed out that Danish higher education institutions did not, until the late 1990s, have a strong tradition for focusing on quality assurance of teaching and learning (Thune, 2001). With the Evaluation Center, all study programs in Danish long-cycle higher education were to be evaluated at regular intervals. However, in 1999 the Evaluation Center was given a broader task comprising the entire educational system, and evaluation of higher education gradually became a minor part of its work (Rasmussen, 2014).

In 2007 a new accreditation institution was founded to strengthen the quality assurance work at the university level in Denmark. New programs have to be approved by the Accreditation Council on behalf of the Ministry before they can be offered to students. The decisions are based on a procedure where universities produce comprehensively documented proposals that are evaluated by expert panels against criteria for coherence, teaching resources, research base and not least labor market relevance (Rasmussen, 2014).

The newest development regarding the quality of higher education in Denmark is that a Quality Commission for Higher Education has been appointed by the government to publish its recommendations in the spring of 2014, presumably in continuation of the thoughts and proposals from the above-mentioned Danish Productivity Commission (2013).

In Norway a Quality Reform of Higher Education was passed in 2003. The goal of this reform was to improve the quality of higher education, both at universities and university colleges, and to implement the EU "Bologna model" of 3+2+3 (3 years of bachelor, 2 years of master, and 3 years of PhD studies) (Dysthe and Webler, 2010, p. 253). Higher education institutions now have their own systems for quality assurance. An independent national body for accreditation and evaluation (NOKUT) started operations in 2003 to oversee institutional quality and to accredit institutions and study programs. For institutions that do not follow up on standards, NOKUT can withdraw accreditation (Nyborg, 2007, p. 4).

One of the new initiatives is that students in Norway have to make a kind of agreement with their institutions: they must finish their degrees in a limited time, they will attend certain courses, and follow up lab classes. The institutions, on the other hand, must provide good and sufficient learning conditions, good lectures, flexible education, supervisors with enough time for supervision, and, in all respects, help the students reach their goals (Rangnes and Haraldsen, 2006).

In Sweden the higher education institutions are relatively free to decide on their own organization, allocation of resources and course offerings. The system is based on the principle of management by objectives. The Government lays down directives for operations of the higher education institutions in their annual public service agreements. The Swedish Higher Education Authority exercises supervision of the higher education institutions. Through panels of external assessors consisting of subject experts, labor market representatives and students, the Swedish Higher Education Authority reviews the quality of higher education and the efficient use of resources and public funding at the institutions (Swedish Higher Education Authority, 2013, p. 17, 34).

Conclusion

In the development of higher education in Scandinavia, there are different perspectives on education at play. One perspective sees education as a "public good" that benefits society and therefore should be free and accessible for all students who qualify to be admitted. According to this perspective, one of the main purposes of higher education is to add value to all students, so they can contribute to society. Within the framework of the Scandinavian welfare state, this model has prevailed in the organization of education, health care, and social services.

Another perspective sees education as mainly an "individual investment", and therefore students should pay for attending their education. According to this perspective, one of the main purposes of higher education is instead to select the best among the students, in order to sharpen their market value. The notions of competitiveness and individualism play an important role here. In some of the recent reforms in Scandinavia, as well as in the recommendations of the Danish Productivity Commission (2013), we see this second perspective prevailing.

Even though the current reforms seem to point towards this second perspective and towards principles of new public management, the Scandinavian countries still have educational systems where higher education as a basis is free of tuition fees, students are supported with study grants, and people generally have access to education. The massive diversification of educational institutions during the 20th century, which also provided local access to education, is currently replaced by a process of centralization of higher education and fusions of existing institutions. The rate of participation in higher education is however still growing, supporting the possibility of social mobility, when students from families without traditions of education enter the higher education system. It remains to be seen, in the light of the possible new reforms, whether this development will continue.

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