Access and stratification in Nordic higher education. A review of cross-cutting research themes and issues*

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**ABSTRACT**

The purpose of this review is to investigate cross-cutting research themes and issues related to access and stratification in Nordic higher education (H.E.) (Denmark, Iceland, Finland, Norway and Sweden). We synthesise how recent changes in H.E. policy, practice, and appropriations have influenced educational opportunities along social class, gender and age. In this review we highlight results and conclusions shared by various recent Nordic studies. The emphasis is on the common trends and patterns related to social stratification in access.

**KEYWORDS**

higher education (H.E.); access; social stratification; inequality; Nordic countries

The Nordic countries (Denmark, Iceland, Finland, Norway and Sweden) are regarded as forerunners to achieve mass higher education (H.E.) via system expansion. All Nordic countries have experienced massive increase in their H.E. participation (Ahola, Hedmo, Thomsen, & Vabø, 2014) and the growth has been relatively consistent over a long period of time (Jónasson, 2015). At present, Nordic H.E. enjoys one of leading attainment levels in Europe (OECD, 2016). A powerful belief in education policy among the Nordic countries is that mass H.E. can be both equal and excellent (cf. Kivinen & Hedman, 2016), and that access to the highest levels of education preserves the integrity of the high quality of life and economic well-being of its citizens.

In the Nordic model, H.E. is seen as an important pillar in the welfare system, not only through widening access and opportunity, but also by educating professionals and leaders required for the development of the welfare state. The Nordic model of H.E. can be understood as a shared ideal, if not a concrete similarity. At first glance, the countries unmistakably share common and globally unique features such as H.E. systems largely funded by the state, absence of tuition fees, and egalitarian principles...
undergirding access to H.E. On further reflection, the history and traditions of the national systems vary considerably and specific national policies continue to reshape contemporary H.E. differently in each country (Vabø, 2014). In this review the emphasis will be on the common, cross-cutting trends and patterns; the country-specific features will be described as scope and length permits.

The first wave of expansion of Nordic H.E., from the late 1960s to the late 1980s, established that universities shall remain similar in substance and quality, with no formalised institutional hierarchies (Ahola et al., 2014). However, since the 1990s the expansion has occurred by integrating varying systems of institutions as part of H.E.; resulting in an array of institutions that vary in academic orientation, selectivity and prestige (Ahola et al., 2014; Isopahkala-Bouret, 2015; Jóhannsdóttir & Jónasson, 2014; Thomsen et al., 2017). Most recently, H.E. institutions have been involved with merger processes, and the substantial growth in the number of students and degree programmes has slowed down. With such trends, which seem to follow global trends, we believe the egalitarian basis of the Nordic model has been challenged and that both access and opportunity do not mean the same things they once did. We intend to delve deeply into these issues in this review.

On closer inspection, Nordic HE systems have transformed from cohesive and standardised models into more complex systems with a variety of institutions, types of programmes and disciplines. Despite the fact that the overall inequality in educational opportunities and access to H.E. has diminished in the Nordic countries (Börjesson, Ahola, Helland, & Thomsen, 2014) as more students receive H.E. degrees, there are widening social biases of access to established universities, especially in the most prestigious disciplinary programmes (Kivinen, Hedman, & Kaipainen, 2012; Nori, 2011; Thomsen, 2015). Students’ choice (where would they like to have access; who applies and where) and recruitment patterns (where do students get access; who are selected and where) provide us with indicators of changing valorisations of H.E. programmes, fields and types of study, and institutions (Ahola et al., 2014; Nori, 2011). In this review, by analysing social stratification in access, we are able to ascertain the central role H.E. plays within the changing social democratic welfare states, as well as the effects of policy reforms upon it.

The purpose of this review is to investigate cross-cutting research themes and issues related to access and stratification in Nordic H.E..¹ We synthesise how recent changes in H.E. policy, practise, and appropriations have influenced educational opportunities along class lines (often measured as academic/non-academic family background) gender and age. Other social differences lending to opportunity gaps in access include ethnic background, race, nationality, religion, sexual orientation, prior education and educational achievement. Our intention is to incorporate their intersection with social class and gender to a central point of analysis. The result will shed light on the problematic nature of the institutional stratification for access to H.E. as well as the future opportunities of graduates. The specific research questions in this review are:

(1) What are the changes regarding access to Nordic H.E. in recent years?
(2) What are the similarities and differences in the changing access patterns within and among the Nordic countries?
(3) To what extent do Nordic H.E. systems exhibit increasing social stratification?
Defining access and opportunity gap in Nordic higher education

For the purposes of this review, access to H.E. refers to the extent to which prospective students have a chance to enter to, participate in, and gain a degree in H.E. By educational law and policy in Nordic countries, the opportunity to enter H.E. is to be as equitable as possible so that every citizen may take full advantage of their educational potential. Increasing access requires making more student places available at universities and other H.E. institutions and creating a demand for these places. Improving access can also mean removing barriers that might prevent some students from participation in certain courses or academic programmes.

In the Nordic countries, everyone who meets the requirements for admission has the opportunity to apply for and potentially gain access to H.E. In most cases, eligibility requires that one has to complete upper secondary schooling or specific courses. Admission is based on final school grades, final exam grades, or grades in matriculation examination. In addition, specific disciplines and study programmes apply entrance examination. On further observation, we can see that the growth of H.E. has resulted in an increasing variety of academic level of students, and the admission rates between different institutions and study programmes have considerable differences (Vabø, Naess, & Hovdhaugen, 2016): Some are highly selective and accept only students with highest records of exam results, and others take in all qualified applicants. Occasionally, the rapid expansion of student places has led to lower entry requirements (Vabo et al., 2016).

The quality of education is to some extent related to the selectivity of academic degree programmes. For example Finnish students who want to enrol in a research university must first pass a competitive entrance examination in their chosen discipline. What makes the admission process especially tight is the limited number of seats (numerus clausus) in each disciplinary degree programme and therefore only a small portion of qualified applicants (often less than 10%) can gain admission (Isopahkala-Bouret, 2018). Also at Finnish universities of applied sciences, degree programmes have limited number of seats and the admission process can be very competitive. In Sweden, professional programmes at universities have also strictly regulated admission criteria and numeros clausus (Hedmo, 2014). Moreover, in all Nordic countries, there are an increasing number of specific Master’s and doctoral programmes, including international Master’s programmes, in which students are selected via programme-specific application and admission processes.

The term “opportunity gap” refers here to the ways in which social differences contribute to or perpetuate lower educational aspirations, achievement, and attainment for certain groups of students. Factors such as socioeconomic status, gender, age, ethnicity, race, religion, nationality, sexual orientation, disability, past academic performance, special-education status, and family income or educational-attainment levels – in addition to factors such as relative community affluence, geographical location, or upper secondary school facilities – may contribute to limited access to educational programmes more for some students than others. Generally speaking, opportunity gap refers to unequal distribution of resources, such as educational access.

It is noteworthy that the growth of student places and programmes has not been evenly distributed within Nordic H.E. systems. In Finland, Sweden and Norway, with populations of 5.5 million, 10 million, and 5.25 million respectively, the expansion in
access has been directed to the new universities of applied sciences and university colleges, while the traditional university sector has not grown significantly (Ahola et al., 2014; Vabø & Hovdhaugen, 2014). On the contrary, in Denmark, with a population of 5.7 million, universities have increased their share of new entrants, while university colleges have decreasing participation rates (Ahola et al., 2014). In Iceland, the population is a mere 325,700 people and the biggest growth of H.E. has been accomplished via integration of non-university institutions into a unified university sector (Jóhannsdóttir & Jónasson, 2014). As a perhaps unintended result, access to the most prestigious programmes is more difficult than any other time in recent history, resulting in increasing opportunity gaps.

**Emerging issues with social inequality**

The expansion of H.E. in the Nordic countries has led to a persistent inflationary trend toward the need for ever-increasing amounts of degreed education to gain a certain societal status (Aro, 2014; Börjesson et al., 2014; Isopahkala-Bouret, 2015). The decrease in the relative value of H.E. has been accompanied by an increasing importance of the elite H.E. (Börjesson & Broady, 2016) and status dispersions of degrees of all kinds (Isopahkala-Bouret, 2015). As a consequence, although not commonly acknowledged, the relatively egalitarian Nordic H.E. systems are also characterised by conspicuous social differences in access to different H.E. institutions and fields of study (Ahola et al., 2014; Beach & Puaca, 2014; Nori, 2011; Thomsen, Munk, Eiberg, & Hansen, 2013). The system expansion has widened access mainly through a channelling of first-generation students into less prestigious programmes and institutions (Thomsen, 2015). Therefore, it is increasingly important to address fairness of access and opportunities not only in terms of the Nordic equality ideal but also in terms of who gains access to the best institutions and programmes.

In the intersectionality of class, gender and other social differences in Nordic H.E. it is critical to understand how some programmes and institutions mindfully target specific groups for recruitment. The result is that programmes are constituted differently according to social distinction. The observation is apparent in the case of non-traditional students, defined here as first-generation students, international students, mature students, and/or students with a low socio-economic background. Despite the easing of financial constraints, in comparison with many other countries, non-traditional students experience the pros and cons of access to H.E. in singularly unique ways, sometimes including marginalisation.

**Class-related disparities**

Many of the reproductive patterns of academic, high-/middle-class families found in the international literature are also found in Nordic contexts. Students with the highest amount of cultural capital, measured in the form of the highest level of the education of parents, tend to concentrate in established research-intensive universities, the dominant H.E. institutions. In general, young applicants from affluent urban backgrounds are more likely to end up in prestigious H.E. institutions in metropolitan areas, and into the more elite programmes, which leads to a socio-economically skewed student body
Cultural capital is gained in many ways from many places, but a prospective student’s home life, the availability of intellectual resources and discourse, and parents’ educational and career patterns deeply influence students’ final grades (matriculation exam), entry examination test scores, motivation statements and interview success, as well as availability of support and resources needed in access to H.E. In addition, highly structured social disparities can be assumed on the basis of the status of the upper secondary schools (gymnasia) from which the students come to universities and other H.E. institutions (Haltia, Jauhiainen, & Isopahkala-Bouret, in press). Educational choices reflect the content and form of social capital that students have (Börjesson et al., 2016). Students from privileged backgrounds predominantly choose programmes with high entrance qualification requirements leading to more lucrative career pathways.

The establishment of new H.E. institutions and study programmes, such as the universities of applied sciences in Finland, while serving many more students, can also partially explain the increasing unequal H.E. opportunities for students with a non-academic social background (e.g. Kivinen et al., 2012). The establishment of an inclusive non-university H.E. system goes hand in hand with enhancing the exclusivity of the traditional university sector (Isopahkala-Bouret, 2018). New types of vocationally-orientated degree programmes offer socially diminished credentials and narrower returns in the labour market, and in many cases, forecloses possibilities of graduate study and membership in many professions (Isopahkala-Bouret, 2015). As a consequence, they are not appealing alternatives for privileged students, as most students in these programmes come from non-academic family backgrounds.

**Gender-related disparities**

Historically, male students have been over-represented in H.E., but today the majority of H.E. students are female. In Nordic countries about 60% of students are female (OECD, 2016). There are persistent gender differences in terms of access to university. The gates of traditional universities are more open to men. For example, in 2013 in Finland, 24% of female applicants and 27% of male applicants were accepted into elite programmes (Vipunen, 2016). At first glance, the percentage difference is not compelling. On further reflection, admission rates differ by study field, in some cases considerably (Börjesson et al., 2014; Nori & Mäkinen-Streng, 2017). Some fields are simply dominated by men (i.e. engineering and natural science) and the male acceptance rates are typically high, while in other fields (such as education, psychology and art) women outnumber men by a wide margin.

**Age-related disparities**

In the Nordic countries, students graduating from H.E. are on average a little older than students in many other countries (OECD, 2016). A person has the chance to ramp up their education through study programmes, preliminary programmes, and even work situations before applying. However, educational opportunities are affected by age as well. When a student applies through the main admission route, at the traditional age, he or she is more likely to be admitted. The possibility of admittance to Finnish universities will become
smaller by about 2% for each year the process is delayed (Nori, 2011). This means that a 30-year-old applicant’s possibility of access is approximately one-fifth lower than that of a 20-year-old applicant (Nori, 2011). Older students have in some cases taken an alternative, often longer, route of access, resulting in age and educational status differences (Haltia et al., in press; Thomsen et al., 2013). In Finland, for example, older students can use the so-called Open University gateway. After completing approximately one-third of a degree programme at the Open University with high grade point averages, a student can be admitted to a regular degree programme at the university and the credits obtained can be used directly as part of a degree. However, this route has remained narrow and disputed among the universities (Haltia, 2012). In Sweden, there has also been an access system which gave non-traditional students an alternative route to H.E., but nowadays the share of students using this second chance path is relatively low (Orr & Hovdhaugen, 2014). Similarly, Norway introduced an alternative access route based on prospective students’ competence gained outside the formal education system and students with a non-academic background, as well as mature students, have benefitted most from the system (Orr & Hovdhaugen, 2014).

**Immigration background-, ethnicity- and race-related disparities**

Increasingly students with an immigration background have gained access to programmes of all kinds, providing diversity, but also raising challenges. The Nordic data are scarce regarding access and opportunity gaps of students from ethnic or racial minorities. At this time, while national and EU immigration policies are generally controversial, policymakers and practitioners are conflicted regarding immigrants’ matriculation into H.E. and the extent to which precious resources should be spent on inclusive actions. Internationalising of the H.E. curriculum, including international programmes and English language teaching, is part of the debate, although internationalising policies are usually aloof to issues regarding racial inequality, and besides, racism in academia does not only concern students with a foreign background. The size of the student population with an immigration background, the percentage, and the trends regarding numbers of inquiries are in flux, varying from country to country, institution and field of study.

To complicate matters, a fuller picture reveals the juxtaposition of factors involved in the demographic profiles of programmes and H.E. institutions, including self-selection, changes in the professions themselves, and global trends. Also noteworthy is that when former non-university institutions were gradually integrated into the H.E. sector, they brought programmes that were not equally proportioned in class, gender or ethnicity/race. As previously noted, various programmes, such as nursing, teaching, library science and social services, expect a much higher percentage of women. In which H.E. institutions and programmes are students with immigrant backgrounds most welcome?

**Social selection in access to doctoral studies**

In Finland and Denmark, universities are the only institutions to supply doctoral degrees. In Norway and Sweden, the degree system is integrated in a way that both universities and university colleges can provide similar degrees up to the doctoral level. In Iceland, doctoral programmes have only been established in the last 15 years; until
Recently, Ph.D. degrees were undertaken abroad. In all Nordic countries, there has been growth in the overall number of Ph.D. programmes and graduation.

Previous studies have assumed that the social origins of the doctoral students do not greatly differ from the social origins of the Master’s level students (Triventi, 2013). Accordingly, doctoral students with lower-class backgrounds have already adapted to the academic community and the lifestyle of the fellow students during their earlier studies, and the influence of family background will be ameliorated. On the other hand, there are studies suggesting that family background plays a significant role after the Master’s degree level (Mastekaasa, 2006). However, when comparing Master’s and doctoral students by the disciplines in the Finnish context, the picture is foggy (Jauhiainen & Nori, 2016). The differences among the disciplines are not uniform; those disciplines that are the most elite at the Master’s level (e.g. medicine and law) are not necessarily so at the doctoral level.

Student access, and academic capital, was clearly enhanced when parents possessed doctoral degrees or research careers (Mastekaasa, 2006). Results indicate that the selective effect of social origins does not vanish when pursuing the highest degrees in academia. The elite sub-field of Finnish doctoral education is overly represented by “educational inheritors”, i.e. students coming from high-capital homes pursuing a degree at younger age than most, especially in the most highly respected and potentially lucrative disciplines in metropolitan areas (Jauhiainen & Nori, 2017). Along the same lines, the younger, discipline-oriented male Ph.D. students are more often invited to join research groups and to enter a research career over a middle-aged female with a professional background (Angervall, Beach, & Gustafsson, 2015).

As indicated, access to doctoral programmes follows the segregated lines of male- and female-dominated disciplines and fields. Overall, according to Nordic statistics, in 2014 the share of female doctoral students in five countries was 51% as a whole, although with substantial variation by country and even more by discipline or field of study (NIFU, 2016). For instance, in Iceland the proportion of female Ph.D. students was 61% while in Sweden it was just 47.5% (NIFU, 2016). The fact is, Sweden has the largest female undergraduate population of the Nordic countries, which undergirds the momentum of the gender gap in the doctoral level. There is not much research regarding specific patterns or mechanisms regarding how gender affects access to doctoral studies. We believe the answers can be found in gender skews of specific programmes and the professions they represent. In the Norwegian context, men were slightly more likely than women to access doctoral studies but specific factors to explain the gap, i.e. motherhood and admission bias, are not forthcoming (Mastekaasa, 2005). It is hypothesised that gender gaps result from patterns reproduced in the recruitment and application processes in varying disciplines and programmes (Haake, 2011).

The delineated picture of doctoral student population reflects the policy of equal access and opportunity. Accordingly, despite the strict selection processes created during recent decades, universities have recruited Ph.D. students from a wide assortment of backgrounds. At issue are two trends worth watching. One is whether there is a risk that the aims, values and practices dominating doctoral education will standardise it in deleterious ways. Is it possible to achieve standardisation, such as...
completion time limits, and preserve student versatility? The other is, as we are discussing admission rates, what about graduation rates and other factors, such as variance of duration toward doctoral completion between men and women, as well as variances of age, nationality and ethnicity? The graduation rates reveal a great deal of differentiation.

The role of funding and private capital in access to higher education

The discussion on access to H.E. in the Nordic context has been dominated by the analysis of cultural capital. Since the major part of the Nordic H.E. industry is publicly funded with low tuition demands, it is a fair assertion that wealth is not as relevant an indicator of access to H.E. as it is in the countries with a large private H.E. contingent. In the U.S., all universities charge tuition, ranging from $20,000 to $80,000 per year, though scholarships and loans are available to high percentages of students. Nordic H.E. systems have been perceived as moderating differences in educational and social background as education is tuition-free (or low fee) for the students and direct student subsidies are provided (Haltia et al., in press; Thomsen et al., 2013).

However, the agenda on broad and egalitarian access is in tension with attempts to cut public costs of H.E. All Nordic H.E. systems are experiencing pressure to diminish overall costs. In Finland there have been drastic cuts in public financing during the last two years, for example. The working conditions of the academic staff and conditions for high quality teaching have been affected, and there are more obligations to raise external grant money. Gender, along with race, social class and ethnicity, has been shown to be in determining who is most disadvantaged by these developments.

Diminishing public funding increase competitiveness between institutions and programmes (Rinne, Jauhiainen, & Kankaanpää, 2014). There has been clear impact on institutional profiling, and programme selection (Beach, 2013). More to the point, depletion of overall resources has not occurred evenly across disciplines and programmes. The employment conditions and salaries of institutions and faculties in a “non-elite” sector may have worsened more than in elite programmes, resulting in more obvious changes, such as larger class sizes, more mass lecturing, group advisement, peer advisement and less personal supervision (cf., Angervall et al., 2015; Jauhiainen, Jauhiainen, Laiho, & Lehto, 2015). For example, in Sweden, funding to the humanities and the social sciences and educational sciences has already shrunk and together these areas now gross less than half the research funds per annum from the State compared to medicine and less than 40% of the distribution of funds to science and technology (Beach, 2013). These developments have considerable gender influence as female staff and students are often over-represented in fields related to public professions such as teaching, nursing and social services with less commercial funding; furthermore, women also seem to be discriminated against within faculties (Angervall et al., 2015).

In the Nordic H.E. systems, the volume and role of private H.E., and even its definition, differ from country to country. For example, the private H.E. sector consists of 15% of the student population in Norway (Vabø & Hovdhaugen, 2014). In Iceland, four universities require substantial tuition fees, and are often classified as private institutions, but nevertheless receive full contributions for their full time equivalent (FTE) teaching contributions for their teaching and some for research from the state
(Jóhannsdóttir & Jónasson, 2011). In the Finnish H.E. system, there are no private universities; however, for-profit universities, governed from abroad, have provided degree programmes in Finland since the second decade of this century (Kosunen & Haltia, in press).

However, even though private universities are rare, a non-regulated, private course market has emerged alongside the public education system. In Finland, for example private enterprises have started to offer training and tutoring for preparing prospective students to the entrance examinations of public universities (Kosunen & Haltia, in press; Kosunen, Haltia, & Jokila, 2015). The economic threshold to enter some of these private preparatory courses constitutes unique obstacle in access to H.E. The preparatory courses require personal economic investment, i.e. course fees up to €6000 in some of the courses in the most exclusive disciplines. In such cases, economic capital seems to be pivotal in access to H.E. A strong case can be built for monitoring the trends in for-profit tutorial systems in the Nordic countries. Such systems effectively provide advantages to wealthy students.

**Recommendations for further research on access and opportunity in Nordic higher education**

We hope this review yields important insights for policymakers in H.E. regarding resource allocation and equitable policy formulation in light of what we know regarding access and opportunity gaps. Here is a list of recommendations for further study:

- Which social groups are under-represented in access to Nordic H.E? How have the access patterns evolved in relation to contemporary policy reforms?
- Will students from under-represented groups, such as students with migration background or older students, gain access to all types of institutions and programmes, or will they be relegated to specific newer systems of H.E?
- Specifically, what mechanisms influence the social strata in terms of access?
- How does allocation of (diminishing) resources influence access to H.E. in the Nordic countries? What are the classed and gendered consequences resulting from competitive and commercial funding? How do the emerging processes of privatisation of Nordic H.E. influence access and opportunity?
- What are the variances regarding the selection processes in doctoral education?

The realisation of equal opportunity in education can be best promoted by eliminating marginalisation practices through egalitarianism and excellence at all stages of education. One concrete method is the prevention of regional inequality of educational institutions. Another is to provide welcoming structures and programmes of inclusion for non-traditional students, for example students with an immigrant background who might otherwise remain on the outside of the H.E. system. Diminishing resources and budget cuts must not include abandoning our resolve to promote the finest ideals of widening access and educational opportunity in Nordic H.E.
Notes

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