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The academic-vocational divide in three Nordic countries: implications for social class and gender

Mattias Nylund (6)a, Per-Åke Rosvall (6)b, Elsa Eiríksdóttir (6)c, Ann-Sofie Holm (6)a, Ulpukka Isopahkala-Bouret od, Anna-Maija Niemi od and Guðrún Ragnarsdóttir^c

^aDepartment of Education and Special Education, University of Gothenburg, Gothenburg, Sweden; Department of Applied Educational Science, Umea University, Umea, Sweden; School of Education, University of Iceland, Reykjavík, Iceland; denter for Research on Lifelong Learning and Education (CELE), Department of Education, University of Turku, Turku, Finland; eFaculty of Educational Sciences, University of Helsinki, Helsinki, Finland

ABSTRACT

In this study we examine how the academic-vocational divide is manifested today in Finland, Iceland and Sweden in the division between vocationally (VET) and academically oriented programmes at the upper-secondary school level. The paper is based on a critical re-analysis of results from previous studies; in it we investigate the implications of this divide for class and gender inequalities. The theoretical lens used for the synthesis is based on Bernstein's theory of pedagogic codes. In the re-analysis we draw on previous studies of policy, curriculum and educational praxis as well as official statistics. The main conclusions are that contemporary policy and curriculum trends in all three countries are dominated by a neo-liberal discourse stressing principles such as "market relevance" and employability. This trend strengthens the academic-vocational divide, mainly through an organisation of knowledge in VET that separates it from more general and theoretical elements. This trend also seems to affect VET students' transitions in terms of reduced access to higher education, particularly in male-dominated programmes. We also identify low expectations for VET students, manifested through choice of textbooks and tasks, organisation of teacher teams and the advice of career counsellors.

KEYWORDS

Vocational education; social class; gender; policy; curriculum; educational praxis

1. Introduction

Structural inequalities, often described as a problem of social reproduction (Althusser, 1972; Beach & Dovemark, 2009; Nylund, 2012), seem to be an inherent property of educational systems. On a societal level, individuals can be expected to follow very different educational paths, depending on social differences such as class and gender. One important factor in this context is the distinction between more academic and vocational types of education. In the Nordic countries today, this is manifested at the upper-secondary school level in the division between vocationally oriented and academically oriented programmes and institutions. The social class division is particularly evident when comparing academic and vocational programmes, while the gender division is more apparent among various vocational programmes. These divisions play a crucial role in the process of social reproduction in that they provide access to different types of knowledge (Nylund & Rosvall, 2016), identities (Dovemark & Holm, 2017; Rehn & Eliasson, 2015) and thus life opportunities (cf. Kap, 2014). The problems of gender and social class reproduction have been recognised in the Nordic countries and targeted by policies based on "a Nordic model", which emphasises equal opportunities in education (Arnesen & Lundahl, 2006; Blossing, Imsen, & Moos, 2014). However, previous studies have indicated that the educational equality approach in contemporary policy and curricular trends has become secondary to goals such as competition and employability (Isopahkala-Bouret, Lappalainen, & Lahelma, 2014; Lappalainen & Lahelma, 2016; Lundahl, Arreman, Lundström, & Rönnberg, 2010; Nylund, Rosvall, & Ledman, 2017). Whether it is still relevant to speak of a Nordic model based on social egalitarianism has thus been called into question (see guest editorial paper in this special issue).

In this paper we aim to critically analyse and compare contemporary trends in the ways that the academic-vocational divide is manifested at the upper-secondary level of education in Finland, Iceland and Sweden, with particular focus on implications for the social distribution of knowledge in relation to social class and gender. We concentrate on the vocational programmes, since it is in these that class and gender aspects are most apparent. By synthesising previous research, we analyse and compare the three Nordic countries in relation to the following research questions:

- (1) How is the academic-vocational divide expressed in contemporary policy and curriculum trends and what does this imply for the social distribution of knowledge in relation to social class and gender?
- (2) How is the academic-vocational divide reflected in educational practice and what does this imply for the social distribution of knowledge in relation to social class and gender?

Finland, Iceland and Sweden present interesting cases for comparison in this context, as the vocational-academic divide differs in important ways in each country, e.g. in how education is organised, how reforms have been implemented and who the stakeholders are.

2. Theory and methodology

Upper-secondary education is organised differently in Finland, Iceland and Sweden, varying in certain key respects. For instance, vocational and academic tracks are followed in separate upper-secondary schools in Finland, whereas they are often housed within the same institutions in Iceland and Sweden. Among the three countries, the vocational programmes vary in terms of number of applicants and programmes, and whether VET graduates are eligible to enter higher-education institutions. Comparing the three countries thus poses a methodological challenge. In addition, all countries collect different kinds of statistics and the available research differs on issues such as social class and gender. It has been particularly difficult to obtain an equal number of examples and studies for each country (especially in the case of Iceland). However, in all three countries there is a core division between what we here call "academic programmes", which prepare students for higher education at university level, and "vocational programmes", which focus on providing training for specific trades or occupations. In such a categorisation, approximately 33% of the student population in Iceland and Sweden are enrolled in vocational programmes, while in Finland the number is closer to 40%.1

Our theoretical approach draws on a critical research tradition that focuses on how the organisation of education affects class and gender relations (Apple, 2004; Beach & Dovemark, 2011; Bernstein, 2000; Lappalainen, Mietola, & Lahelma, 2013). For the purpose of this paper, class and gender are understood in a broad way, namely as social relations (cf. Hatcher, 2000) created through the distribution of power and resources to different social positions in society, of which the educational system is a vital part. Our notion of class is inspired by neo-Marxist work such as that undertaken by Wright (2009), i.e. the social relations of production are foremost, whilst our notion of gender is inspired by Odih's (2007) work in the same tradition. Vocational programmes have an important position in this context, as historically they mainly socialise students for traditional (and often gendered) working-class positions in the division of labour, with young people from working-class backgrounds typically overrepresented.

Below, we re-analyse and synthesise the results of previous studies that are relevant to our critical inquiry. This method, which is used to provide new information in relation to a specific problem, is a common approach in studies considering critical knowledge (cf. Apple, 2004). The process started with a Nordic research network meeting (JustEd²), in which issues of social justice were discussed. Relevant themes were identified then research experts for different themes within the network, representing different countries, were chosen to write a review of that theme. The authors of this article were thus chosen to write on social justice in relation to the academicvocational divide with focus on gender and social class. The collection of samples from previous research started with the work of the authors and other members of the research network (JustEd). The authors were then responsible for conducting a literature search for their respective countries, identifying previous research with a subject focus similar to that of this study. Prior to this journal's review process, a full manuscript of this text was circulated among researchers in the network in order to prevent important research being left out.

The theoretical lens used for our synthesis is based on Bernstein's (1990) theory of pedagogic codes, which we use to analyse the core principles that guide the organisation and meaning of vocational programmes and their separation from academic programmes. Our primary reason for using the theory of pedagogic codes is that it creates a common language to describe and compare the organising principles in policy, curriculum and pedagogic practice across different contexts. It thus provides an important tool for making comparisons possible. Another important reason for turning to this theory is that it has been created and used for similar purposes elsewhere. Its main focus resides in analysing education as a site of distribution of power and knowledge, particularly in relation to issues of class (cf. Reay & Vincent, 2014) but also gender (cf. Arnot, 2002).

A pedagogic code can be analytically derived from the combined results of, and the relationship between, the classification and the framing of education (Bernstein, 1990). In short, classification is about how boundaries are established and how different categories are constructed by being isolated from, or integrated into, other categories (e.g. school subjects). Framing concerns the relationships within a given classification. Framing is about control, about principles for the regulation of communication and about learning in a broad sense, e.g. in what order and at what pace content is to be learned, what kinds of pedagogical practices are used and how learning is to be evaluated. Variations in classification and framing in different pedagogical contexts have proved to be crucial for understanding the (re)production of class and gender relations (cf. Arnot, 2002; Hoadley & Muller, 2009).

Another aspect of the pedagogic code analysed in this paper is the discursive character of knowledge distributed through the curriculum. What interests us here is the social distribution of knowledge that can be understood as an expression of the academic–vocational divide. Previous critical research has identified differences in the organisation of knowledge, depending on the position in the social division of labour for which students are prepared. Bluntly put, a pattern has been identified in which education for middle-class positions is organised around principles such as flexibility and an inquisitive relationship with knowledge, while education for working-class positions is organised around principles of orderliness and basic civic skills (cf. Apple, 2004; Beach, 1999).

Bernstein (2000) and other researchers (Shay, 2013; Wheelahan, 2015) make a distinction between knowledge organised in horizontal discourses as opposed to that in vertical discourses. It is mainly through principles of classification that knowledge takes different forms. When knowledge is classified in relation to disciplinary systems of meaning - that is, as more theoretical, abstract and conceptual - it has a vertical character. If, instead, knowledge is classified in relation to local contexts or "everyday experiences", then knowledge has a horizontal character. These different types of knowledge have different powers. Roughly stated, vertical discourses are powerful in enabling abstract and critical thinking, whilst horizontal discourses are powerful for understanding and acting in specific empirical contexts (Young, 2008). A key property of vertical knowledge discourses in the context of this paper is that they are the means by which society conducts its conversations about itself, both in terms of what it is and what it should be. Access to vertical knowledge is thus fundamental to educational goals such as critical thinking, exploring alternatives and partaking in "society's conversation" (Wheelahan, 2015; Young, 2008), and thus becomes a question of social justice, which Bernstein (2000) refers to as "pedagogic rights". This is especially the case in a class context, as access to this type of knowledge has historically been limited for workingclass students (Apple, 2004; Bernstein, 2000), e.g. in Nordic vocational programmes.

Our process of analysis can be described as follows. We first created the group at the network conference mentioned above, and discussed an outline for the study. After the conference, each author collected samples of previous research and summarised the findings. These summaries were separated according to whether they related to (a) policy/curriculum level or (b) educational practice level, and whether they related to (x) class and/or (y) gender. The research questions and theory were, therefore, key in organising the material from the beginning of the study. The group

then met for 1 week at another network conference to discuss the re-analysis process. During this week, the results from previous studies were discussed and interpreted by the group in relation to the theory and research questions. The results of this process are presented below.

3. The academic-vocational divide: contemporary trends

3.1. The academic-vocational divide in educational structures, policy and curricula

Below, we turn our attention to research on policy and curricula, as well as to official statistics to discuss the divisions of social class and gender in upper-secondary education and the contemporary trends that can be identified. In the first section, we summarise our findings in relation to how class and gender are divided in uppersecondary school. In the second section, we summarise our findings when re-analysing previous research on a policy and curriculum level. In the third section, we turn to the question of what these trends imply for the social distribution of knowledge in relation to class and gender: first we relate the trends regarding how education is classified to the social distribution of knowledge, then we look more closely at access to higher education and, finally, we relate the trends regarding how education is framed to the social distribution of knowledge.

3.1.1. Social class and gender divisions in upper-secondary school

Statistics and research on upper-secondary education in Finland, Iceland and Sweden indicate divisions of class and gender. Students whose parents do not have an academic education are dominant in vocational programmes, while students whose parents have an academic education are dominant in academic programmes (Broady & Börjesson, 2002; Nylund et al., 2017; Saari, Aarnio, & Rytkönen, 2015; see also Kivinen, Hedman, & Kaipainen, 2012). In Iceland, information on social class is "hidden", both in research and in other public documents. Nevertheless, the number of applications for uppersecondary schools shows that class matters. Traditional academic grammar uppersecondary schools are more popular than the comprehensive upper-secondary schools (DV, 2017), and almost all of the upper-secondary grammar schools select their students based on academic grades (Verzlunarskóli Íslands, 2016).

In all three countries, there are several short-term preparatory or introductory programmes for young people who do not have the qualifications to enter uppersecondary school programmes. These are mostly aimed at students who need support and guidance in making an educational choice or who need to improve their basic academic proficiency, such as in their country's mother tongue or mathematics. According to Finnish and Swedish studies, students in introductory programmes more often come from homes with more restricted academic backgrounds (Dovemark, 2011; Dovemark & Beach, 2016; Dovemark & Johansson, 2015; Loeb & Wass, 2015; Niemi & Kurki, 2014). In Finland, the major proportion of students regarded as having special educational needs enter vocational programmes rather than academic programmes (Kirjavainen, Pulkkinen, & Jahnukainen, 2016; Niemi & Mietola, 2017).

Generally, the vocational programmes are more gender-segregated than the academic programmes. For instance, vocational programmes in healthcare and nursing are disproportionately female, while programmes such as technology and transportation are disproportionately male (Blöndal, Jónasson, & Sigvaldadóttir, 2016; Ledman, Rosvall, & Nylund, 2017; Statistics Finland, 2015a; Statistics Iceland, 2017). Previous research also suggests that traditional class and gender patterns are often reproduced in vocational programmes (Hedlin & Åberg, 2013; Hjelmér, 2012; Lappalainen et al., 2013; Rosvall, 2011b). Moreover, in considering males and females as groups, it appears that females (1) have higher grades in all three countries on completing lower secondary school (Öhrn & Holm, 2014) and (2) are more likely than males to enter academic programmes (Kupiainen, 2016; Ledman et al., 2017; Statistics Finland, 2015b; Statistics Iceland, 2017). This phenomenon is more prevalent among female students from working-class backgrounds (Saari et al., 2015). Class and gender thus intersect with the academic-vocational divide, making the division likely to influence the (re)production of these social positions.

3.1.2. Contemporary policy and curriculum trends: a growing divide

On a system level, the three Nordic countries represent different ways of organising academic and vocational programmes. In Iceland and Sweden, the upper-secondary schools were "integrated" at the beginning of the 1970s. This means that vocational and academic programmes follow the same overarching curriculum and could be held in the same upper-secondary educational institution (Guðmundsson, 1993; Nylund, 2013). The organisation is different in Finland, where upper-secondary education is divided into separate vocational and academic institutions (Heikkinen, 2004). Although differing in organisation, the trend in all three countries since the 1970s has been a weakening of the division between vocational and academic programmes through policy, curriculum and general organisational structure. Vocational and academic programmes have thus gradually become more similar in terms of curricular content, entry and exit points, as well as the promise of access to higher education (Carlbaum, 2012; Guðmundsson, 1993; Klemelä, 2000; Nylund, 2013). However, clear neo-liberal influences can be identified in contemporary policy and curriculum trends in all three countries, with employability and "market relevance" stressed in vocational programmes (Nylund et al., 2017; Lappalainen & Lahelma, 2016; Isopahkala-Bouret et al., 2014; Ragnarsdóttir, in press), which strengthen the academic-vocational divide.

In terms of classification, the division between vocational and academic programmes is one of the principal starting points in this contemporary policy trend, inter alia expressed through the "class prejudice", conspicuous in much contemporary policy, in which students attending vocational programmes are viewed as being uninterested in "theory", civic education or general subjects, and mainly interested in "practice" or workplace learning (Beach, Lundahl, & Öhrn, 2011; Niemi & Rosvall, 2013; Nylund, 2013; Rosvall, 2015).

In Sweden the latest upper-secondary reform in 2011 substantially strengthened the division between academic and vocational programmes. In the accompanying curriculum (Lgy11), the vocational programmes were steered towards "workplace relevance" with less time dedicated to general subjects (Nylund, 2013; Rehn & Eliasson, 2015), while the academic programmes were organised according to a more classical academic/disciplinary discourse and with about twice as much curricular space dedicated to general subjects (Nylund et al., 2017).

In Finland a similar trend can be identified in a competence-based model, which was introduced in the 1990s by modifying the qualification frameworks, curriculum, pedagogical arrangements and evaluation practices in vocational education (Isopahkala-Bouret, 2013). According to Wheelahan and Moodie (2017), one of the main ideas behind competence models is to give the industry more influence over what should count as important knowledge. Finnish vocational education is currently going through a new reform that further emphasises on-the-job training and increases the options for earning a diploma; the reform also makes it possible to attain individual sub-diploma goals by offering opportunities to earn competence points not only by studying at school but also in places of work (Nylund & Virolainen, 2017). It is likley that the reform will widen the gap between vocational and academic programmes, at least in terms of programme content and pedagogical practices.

In Iceland a similar competency-based model was implemented in 2008. The reform introduced six fundamental "pillars" into the curricula (literacy, sustainability, democracy and human rights, equality, health and well-being, and creativity), which were to be integrated into all programmes, along with three mandatory subjects (the Icelandic language, mathematics and English). The reform also introduced decentralised curriculum development, in that schools now write their own curricula based on the national curriculum guide (Ministry of Education, Science and Culture, 2012; Ragnarsdóttir & Jóhannesson, 2014). The consequences of this weaker framing of the vocational curriculum have not yet been investigated, but it is likely that the interpretation of what counts as important knowledge will be different, depending on whether the curriculum is written for a vocational or an academic programme.

In short, the trend in all three countries is a stronger demarcation between vocational programmes and disciplinary knowledge discourses, while the demarcation between vocational programmes and "the workplace" is weakening. However, this trend is less clear in Iceland, where the responsibility for curriculum development was transferred from industry stakeholders to the schools with the reform of 2008.

3.1.3. Classification and implications for the social distribution of knowledge

Studies of the new vocational curricula in both Finland and Sweden, including syllabuses, diploma goals and assessment criteria, have shown that the contemporary organisation of content is associated with a marginalisation of educational goals, such as source criticism, historical contextualisation and critical thinking (Isopahkala-Bouret et al., 2014; Nylund et al., 2017). These studies thus suggest that the organisation of knowledge in vocational programmes ignores the potential vertical elements. This, in turn, implies that students in the different tracks (vocational vs academic) are being prepared for very different societal positions as citizens and as employees (Isopahkala-Bouret, 2013; Nylund, 2012; Nylund et al., 2017). Furthermore, it also implies an enhanced uneven social distribution of knowledge (Bernstein, 2000). In Iceland, as described above, the decentralised policy implemented in 2008 suggests a weaker framing of the mandatory academic subjects (Icelandic, mathematics and English), and schools now have the freedom to contextualise subjects based on the needs of the workplace. However, the unifying principles introduced in the fundamental pillars may, in future, affect the values promoted in some vocational programmes.

In terms of access to higher education, the reduction of vertical knowledge is manifest in a number of ways. One is in a formal difference: students in vocational programmes in Iceland and Sweden are not automatically eligible to enter institutions of higher education, and few students from Finnish vocational programmes later enrol in research universities (Lundahl et al., 2010; Ministry of Education, Science and Culture, n.d.; University of Iceland, 2016). Another manifestation is the general contextualisation of content through which students are directed towards specific vocational contexts and vocational higher education (Haltia, Jauhianen, & Isopahkala-Bouret, 2017; Nylund & Rosvall, 2016); thus, it is likely that vocational students are not as well prepared for higher education as their academic counterparts.

In terms of gender, all three countries show a differentiation whereby vocational programmes dominated by females are directed towards "consumption", while their male counterparts are directed towards "production" (cf. Ledman et al., 2017; Odih, 2007). The discourses constituting these values might be understood in relation to structures in society at large. In the curricula, societal values are reinforced by these discourses, where physically building society (construction, repair and production, associated with occupations pursued by men) seems more valued traditionally, while consumption or care does not seem to be valued as highly. Furthermore, in Sweden the curriculum of 2011 has a gendered aspect in that content with weak legitimacy (such as entrepreneurship, empathy, etc.), both in disciplinary and in labour-market contexts, is mainly found in vocational programmes dominated by females (Ledman et al., 2017; Rehn & Eliasson, 2015).

3.1.4. Changing transitions to higher education: patterns of polarisation

Contemporary policy and curriculum trends also seem to affect students' transitions. In Finland, since the late 1990s, vocational qualifications have offered general eligibility to pursue higher education. However, the separation of vocational and academic programmes at the upper-secondary school level continues to influence choices in higher education. According to Haltia, Jauhiainen and Isopahkala-Bouret (2017), only 3% of new students admitted to universities had not graduated from an academic uppersecondary school programme. Most students from vocational programmes in Finland who continue to higher education enrol in universities of applied sciences. On average, a quarter of the students at universities of applied sciences have vocational qualifications, but the share of students with vocational backgrounds varies from field to field. Statistics Finland (2014) has reported that in 2014, 8% of the new university students (with bachelor's degrees) had either a vocational diploma or a combination of a vocational and academic upper-secondary degree.

Data on students' transitions suggest that the reform of 2011 in Sweden has considerably reduced the number of students transitioning from vocational programmes to higher education. The numbers vary greatly according to the vocational programme, but, in general, the number of students in the first post-reform cohort who continued on to higher education immediately after finishing their vocational programmes was approximately 30% lower than before (Nylund & Rosvall, 2016). The reform has also polarised the gender differences between vocational programmes. As an example, the number of students achieving general eligibility for higher education has been significantly lower in male-dominated programmes; students who were eligible for higher education in the Vehicle and Transport Programme, for instance, dropped from 71% to 8%, while the Health and Social Care Programme dropped from 77% to 51% (Swedish National Agency for Education, 2017).

Less information on student transitions is available for Iceland. However, a study from 2011 found that, of 2,000 vocational graduates, 12% had completed a university degree (Musset & Castaneda Valle, 2013). Vocational students interested in pursuing higher education must normally complete an extra semester or more at uppersecondary school to fulfil all requirements for university admission. In Iceland a strong division between academic and vocational programmes has been the norm since the founding of upper-secondary comprehensive schools (Act on Comprehensive Schools No. 14/1973). These programmes also have different exit points, with vocational programmes firmly directed towards employment and academic programmes directed towards further education, according to the national curricula (Ministry of Education, Science and Culture, 2012).

3.1.5. Framing and its implications for the social distribution of knowledge

Contemporary policy and curricula tend also to exhibit a significant change with regards to curriculum framing. Curricula in all three countries have undergone dramatic alterations. A trend that is especially strong in Finland and Iceland is the promotion of a competence model for organising vocational knowledge. Another closely connected trend is the emphasis on "workplace relevance"; in Sweden this is illustrated by the introduction and strengthening of apprenticeship education (Arneback & Nylund, 2017). In Finland this is being implemented with an ongoing reform in which emphasis is placed on task-specific skills, individual learning paths and task-specific, on-the-job learning (Nokelainen & Rintala, 2017; Nylund & Virolainen, 2017). Likewise, in Iceland, it is clear that the government emphasises employability and sees the workplace aspect of the programmes as being essential in this context; the White Paper (2014) outlining the governmental policy in education specifically states that all vocational programmes should have a workplace component. In addition, after the economic collapse of 2008 in Iceland, the government initiated programmes such as "Education can work" (Nám er vinnandi vegur) intended to provide the unemployed with the means (through education) to become better qualified for re-entering the labour market.

Another manifestation of the academic-vocational divide in the three countries is the involvement of external actors who steer the vocational and academic programmes. In Iceland, for example, academic upper-secondary programmes are heavily influenced by universities, whereas vocational programmes have been steered to a large degree by the business sector, with a focus on employers' interests (Jónasson, 1998; Ragnarsdóttir, in press). In brief, a trend in the three countries, which combines the temporary demands of employers with the design of vocational programmes, i.e. a strongly demand-driven curriculum, can be identified (cf. Nylund, 2013). In Sweden the framing can be summarised as follows: mainly the labour market, but also the state, is given a significant degree of control over vocational content, while the influence of local actors (students, teachers, municipalities) is reduced. In Iceland the trend since 2008 is somewhat different - schools are actually acquiring more power over the curriculum but the labour market is still the core principle for framing knowledge practices. The current reform in Finland emphasises the need to revise the organisation of vocational education because of recent changes in the economy, the labour markets and the skills that will be in demand in the working places of the future (Nokelainen & Rintala, 2017). In the three countries there is also emphasis on each student's individual study path and the opportunities to influence the choice of path, but the justification for individualisation is based on labour-market demands. Because of the focus on specific task-related skills and knowledge, vocational students are not being offered access to theoretical and disciplinary knowledge; rather contemporary trends in all three countries aim mainly at adjusting learning for the preconditions of the workplace and the labour markets.

In short, contemporary policy and curriculum trends in all three countries are influenced by neo-liberal ideas and this trend seems to be widening the academicvocational divide. A clearer division is the separation of vocational programmes from academic programmes, and the classification and framing that puts the principle of "market relevance" at the core of what counts as valued knowledge in vocational programmes. These principles of classification and framing affect the distribution of knowledge and students' transitions in ways that further strengthen the academicvocational divide.

3.2 The academic-vocational divide reflected in pedagogical practice

In this section, we re-analyse previous research on pedagogic practices, including classroom observations and interviews with school staff and students who talk about the pedagogical practices in which they are involved and their implications for the social distribution of knowledge in relation to social class and gender. First, we focus on the different organisations of upper-secondary education in the respective countries. Second, we focus on how knowledge is distributed in different uppersecondary school programmes. All parts include an analysis of implications for social class and gender. However, the third and final part of this section has a specific focus on conditions for developing valued masculinities and femininities.

3.2.1 Organising pedagogical practice: programmes and subjects

As shown in the previous section, Finland, Iceland and Sweden organise their uppersecondary education in somewhat different ways. In Iceland and Sweden academic programmes and vocational programmes are integrated into the same schools (Hjelmér, Lappalainen, & Rosvall, 2014; Ingólfsson, 2014) with the same legislation (Nylund et al., 2017; Ragnarsdóttir, in press).

In Swedish research on schools that offer both academic and vocational programmes in the same institution, there are few or no examples of integrating students from different backgrounds for pedagogical purposes. Likewise, there are few examples of integrating programmes with different genders (however, there are a few examples of integration for economic reasons). It appears that vocational and academic programmes are kept physically separate by being located on different floors, in different buildings or in different parts of the city (Dovemark & Holm, 2017). The same practice is evident in Iceland. In other words, the intention of having a policy to reduce inequalities relating

to class and gender and thereby making the academic programmes and vocational programmes in Sweden more similar in terms of subject offerings has not resulted in more integrated practice. Nor did this intention appear to be reflected in pedagogical practices, such as classification of important knowledge useful to all, or in the framing of pedagogical practices, such as arranging joint classes for different programme types (Berglund, 2009; Johansson, 2009). In addition, it has been observed that teacher-led classes in VET programmes are more scarce than in academic education (Hjelmér, Lappalainen, & Rosvall, 2010; Hjelmér & Rosvall, 2017). Despite some organisational integration of academic and vocational programmes in Sweden, the programmes have been treated as separate; low expectations of vocational students, seen in Finland with a different organisation, appeared to persist, despite having both programme types under the same roof (Hjelmér et al., 2014; Rosvall, Hjelmér, & Lappalainen, 2016).

How academic and vocational programmes are organised and housed could be expected to affect how teacher teams are organised as well as teachers' orientation, i.e. their attitudes towards integrating different programmes and subjects and teamwork across programmes and subjects. Finnish studies indicate that teachers who are responsible for general subjects, such as mathematics and the Finnish language, have a different status in vocational institutions. In vocational education, teachers of general subjects are sometimes considered secondary, and they feel pressure to adapt their teaching to support the vocational curriculum. The hierarchies between vocational teachers and those who teach general subjects also have gendered consequences, especially in the male-dominated fields of technology and transportation, where the majority of teachers are men and the general subject teachers are women (Lappalainen, Lahelma, Pehkonen, & Isopahkala-Bouret, 2012). However, in the results of a crosscultural ethnographic study involving Finland and Sweden, there are examples of cooperation between different subject teachers. The study shows that, in Finnish vocational programmes, general subject teachers seemed to co-operate both with each other and with special education teachers by instituting pedagogical practices in which vocational students are given support during core subject classes without having to leave the classroom for a separate study room (Niemi & Rosvall, 2013).

Swedish studies (Berglund, 2009; Rosvall, 2014) have shown that in large schools with both academic and vocational programmes, teachers of general subjects did not feel the pressure to adjust to VET courses as described above; however, they expressed the belief that integrating general subjects into vocational subjects served to undermine the general subjects. In addition, a few studies in Sweden have shown that more experienced teachers in general subjects (for example, Swedish, English, mathematics) in schools housing both programme types prefer to teach in academic programmes, as these are considered more attractive than vocational ones. The teachers argued that the students in academic programmes were more interested in their subjects and, as a result, more advanced courses in the subjects could be delivered.

In a similar vein, Ragnarsdóttir (in press) showed how Icelandic school leaders highlight institutional challenges presented by the National Curriculum Guide. The Guide emphasises the Icelandic language, English and mathematics but is silent on other subjects, i.e. vocational subjects. This subject hierarchy in the Guide was seen as hindering creativity, maintaining stagnation and placing unequal weight on subject fields. The same institutional subject barriers are also reflected in the work of subject teachers. According to school leaders in Iceland, teachers tend to protect their own subjects, but this differs according to subject, where academic subject teachers were seen to be more conservative compared to vocational subject teachers (see also Eiríksdóttir & Jóhannesson, 2016).

Even though there have been projects in all three countries to integrate vocational and academic education and thus reduce the inequalities of social backgrounds, a strong division between vocational and academic programmes persists. For example, in both the Swedish and Icelandic cases, simply "placing" vocational and academic programmes in the same schools did not eliminate problems of different traditions and hierarchies of programme types and subjects. Research in Sweden shows that vocational knowledge appears to be devalued by teachers in general subjects. Yet, when teachers in general subjects are placed in vocational education settings, as in Finland, their knowledge appears to be devalued. Hierarchies in both cases work against integrating the two programmes.

3.2.2 The social distribution of knowledge between programme types

This divergence of academic and vocational tracks is not only manifest in student choices but also in interactions with study counsellors and teachers. Within study counselling processes in Finland and Sweden, the vocational route appears to be seen as easier, and students considered interested in practical work are more often guided towards vocational tracks (Niemi, 2015; see also Mietola, 2014). Accordingly, it has been observed or expressed in interviews that teachers in academic subjects and study counsellors had lower expectations of vocational students (Hjelmér & Rosvall, 2017). However, Eiriksdottir and Rosvall (2017) found that teachers of vocational subjects in Iceland and Sweden expressed concern that vocational programmes were sometimes portrayed as "easy" and, as a result, "less-academically-competent" students were directed towards those programmes. Yet many of the vocational subjects include difficult concepts, advanced mathematics and demanding reasoning (see also Niemi, 2015). Parents also tend to reinforce the lower status of vocational programmes in Iceland, according to interviews with school leaders (Ragnarsdóttir, in press), who stressed that some parents direct their children to academic programmes instead of vocational programmes and prefer popular upper-secondary grammar schools with a long history and academic traditions instead of comprehensive schools. In this way, parents in Iceland appear to view academic programmes as the best preparation for university study and, as a result, the gateway to working life.

Low expectations towards vocational students have become akin to a self-fulfilling prophesy, as vocational students are provided with less advanced textbooks in mathematics than academic students and given less advanced tasks in preparation for national tests in Swedish or mathematics (Hjelmér & Rosvall, 2017; Norlund, 2011; Rosvall et al., 2016). In Sweden there is quite an extensive body of research pointing to pedagogical practices, teaching or teachers that devalue the skills and knowledge of vocational students, often in comparison with academic students (Andersson Varga, 2014; Björk-Åman, 2013; Johansson, 2009; Korp, 2012; Ledman, 2015a; Norlund, 2011). At the same time, there are quite a few studies showing that vocational students express interest in general subjects as well as in subjects relevant to their programmes (Korp, 2011; Ledman, 2015b; Rosvall, 2015). Such research does not bear out the common portrayal of working-class youth as uninterested in civic education (Ledman, 2015a; cf. Rosvall, 2015; Willis, 1977), which is widely conspicuous in contemporary policy.

A study by Dovemark and Holm (2017) found that increased competition is accentuated in Sweden's local education markets (see also Lundahl, Erixon Arreman, Holm, & Lundström, 2013). This forces schools to profile themselves and construct strong and distinct images or "brands" in order to attract certain categories of learners. Students respond to this by sorting themselves into educational pathways through their choices of schools and programmes. Some of these pathways are associated with academic programmes and "high ability" students, while others are associated with vocational programmes and "low ability" students (Dovemark & Holm, 2017). Jonsson and Beach (2013) also highlight the different statuses between academic and vocational students in Sweden. The authors identified the low status of vocational programmes through comments made about vocational students by those in academic programmes; the authors found that phrases such as "dull, slow and stupid" were used to describe vocational students, while students in academic programmes were described as "fast, sharp and intelligent" (see also Holm, 2013).

In both Iceland and Sweden (Eiriksdottir & Rosvall, 2017), pedagogical practices in VET appeared oriented towards workplace knowledge, understood as learning the specific tasks of the workplace rather than the historical, social and civic dimensions of a particular task. Observations of vocational practices showed that elements of more general knowledge such as those related to ethics, sustainability, workplace racism or globalisation trends were unusual. However, it is worth noting that there is a gender imbalance in VET in terms of access to more general knowledge. It has been confirmed, both by classroom observations (Eiriksdottir & Rosvall, 2017) and surveys (Jormfeldt, 2011), that general knowledge about workplace ethics or work (positions) in relation to the wider society is more common in female-dominated vocational contexts. Female-dominated programmes, such as social and healthcare and child recreation, have more ethical challenges, as these professions involve future caregivers or service providers. The opportunity to connect work-place ethics to general structures in society is, however, seldom taken advantage of, since moral issues are directed to the the recipient of care rather than to the students' own (future) positions in society and as workers (ongoing research by Nylund, Ledman, Rosvall, Rönnlund, VR 2015-02002).

Most vocational programmes are diverse in terms of students' entry merits since some require lower prerequisites than academic programmes. Thus, the programme includes both students with high merits and low merits. A study involving Icelandic and Swedish vocational contexts showed that the most usual way of teaching was to address diversity through individual tasks, especially in male-dominated programmes (Eiriksdottir & Rosvall, 2017). Similar results were found in a Finnish study of a metalwork and machinery programme (Niemi, 2015). The individual teaching practices might not come as a surprise, as some male-dominated programmes have classes in industry, building and construction or halls for vehicles where it is difficult to address the whole class collectively, while expensive material makes it difficult to work on the same task at the same time with collective instructions. The orientation towards individual tasks makes it difficult to discuss general knowledge such as workplace ethics or questions of a civic nature, in contrast to academic programmes which more



commonly have joint teacher-led time with the teacher standing in front of the class leading a discussion.

3.2.3 Different conditions for developing valued masculinities or femininities

For the three countries dealt with in this article, there are studies on gendered practices in all programmes (Hjelmér, 2012) both in terms of comparisons of classroom practices within and between programmes. Constructions of a gendered order are evident in how often women and men talk in classroom interactions and which students are most often addressed by a teacher (Rosvall, 2011a, 2011b, 2013). Åberg and Hedlin (2015) have observed how privileging certain kinds of talk in a building and construction programme ruled out forming non-heterosexual relationships or femininities. However, in a vehicle programme class in which sexist and derogatory language was common, some of the men said that they did not like the language being used: it appeared that they remained silent rather than comment in order not to lose social status among their peers who approved of such language (Rosvall, 2011b). However, the gender divide is more conspicuous in vocational programmes, not least because of the unequal numbers in recruitment to these programmes. Vocational programmes do not exist in a vacuum, and gendered values associated with production (associated with male-dominated programmes) and consumption (associated with female-dominated programmes) (Odih, 2007) are reflected in pedagogical practices; for example, in how questions are framed, what knowledge is regarded as important and future opportunities. As mentioned above, male-dominated vocational programmes are geared to assignments that have a particular, rather than a general, focus. A useful comparison might be mechanics, which is oriented towards a discipline with a particular context, and healthcare, which involves a range of disciplines, including concepts from psychology, sociology and social science (Muller, 2009). Thus, female-dominated programmes are historically understood to include moral issues in their professions as well as their pedagogical practices, while male-dominated programmes are not. Accordingly, students in male-dominated programmes receive less training in ethics and civic discussions even though all professions include those issues. The classification of female- and male-dominated vocational programmes in different occupations and how trades should be understood thus have implications in developing valued masculinities and femininities.

In vocational programmes dominated by one gender it has also been noted that boys' non-traditional choices of health and social care (Hedlin, 2014), or child and recreation programmes (Hjelmér, 2011), for example, are more highly valued than female nontraditional choices of such sectors as vehicle maintenance/production and transportation (Kontio & Evaldsson, 2015; Korp, 2011), where females have to deal with derogatory language (Kärnebro, 2013) and internalise workplace practices in order to be accepted as "real professionals", just as their male peers have to do in order to be accepted as "real men" and "real professionals" (Kontio & Evaldsson, 2015). To our knowledge, pressure on male students studying in female-dominated vocational programmes to perform tasks in a female way in order to be accepted as "real professionals" has not been observed. Thus, the consequences of a minority position are different for women and men; women in the minority need to struggle continuously with masculine vocational hierarchies in order to gain respect (Lappalainen et al., 2012), which implies consequences for educational transitions, i.e. there is more at stake for a female choosing a male-dominated track.

As in other Western contexts (Jackson & Dempster, 2009), it has also been noted in Nordic contexts that in ideal constructions of masculinities there is a strong notion of being average, i.e. not standing out as a "study nerd", and achieving in accordance with one's (academic) talent rather than by the hard work of studying (Holm & Öhrn, 2014; Niemi & Rosvall, 2013; Nyström, 2012; Rosvall, 2013). However, in research by Hjelmér (see Hjelmér et al., 2014), women in a female-dominated vocational context also exhibited such behaviour; in other words, they did not want to stand out as "study nerds", a desire that affected their attempts to officially influence the teaching in order to improve their results in a positive way. In individual interviews or with trusted peers they stated that they wanted higher grades.

Even though the three countries classify and frame their upper-secondary education in different ways, and have been influenced by strong social equality agendas, hegemonic discourses implying an academic-vocational divide are manifested in pedagogic practices. Different organisations do not seem to remove subjects' classification as either more academic or more vocational. In the pedagogic practices investigated here, subjects were hierarchically separated and thus seldom classified as integrated, despite the various organisations. The classification of programmes as either VET or preparatory for higher education also seems to have a strong relationship with how knowledge is framed and classified in the associated pedagogic practices, with implications for both social class and gender.

4. Implications of the academic-vocational divide for class and gender (re) production

There is evidence in all three Nordic countries studied here of low expectations of vocational students - in the attitudes of parents, academic students and educators; in selection processes, textbook choices and student counsellors; and in the system in general. The same low expectations are reflected in contemporary policy and curriculum trends that stress workplace relevance, understood as specific tasks for students who are viewed as uninterested in more general types of education. This tendency, understood as an expression of a pedagogic code, implicitly reveals an academicvocational divide which is closely connected with the status of vocational programmes as reflected in enrolment patterns with consequences for class and gender. Problems of reproduction of class and gender are usually associated with countries that divide students early within their educational systems, such as Germany (Protsch & Solga, 2016), the UK (Avis, 2016) and the US (Allmendinger, 1989). However, our results illustrate that reproduction is a significant problem in the Nordic countries as well.

The academic-vocational divide, and thus a gendered social class divide, is a persistent and therefore not a recent phenomenon; it has origins long before the emergence of contemporary neo-liberal policy and curriculum trends (cf. Durkheim, 2001). As our analysis illustrates, the principles underlying the organisation of uppersecondary schools have varied in kind and over time among the Nordic countries, giving rise to different manifestations and strengths in the academic-vocational divide. One conclusion that can be drawn from this study is that the general principle of integration between vocational and academic programmes has been replaced by a principle of separation, given contemporary trends. This separation, in turn, can be traced to the influence of "market relevance" as a dominating principle for the steering of vocational content. This tendency reflects a curriculum discourse that is also noticeable in many other countries, including Australia (Wheelahan, 2010), Germany and England (cf. Brockmann, 2012). In this approach, market principles steer vocational education, which focuses on (often relatively low-skilled) work-based learning (Canning, 1998; Wheelahan, 2015). This means that the trend is strengthening the academic-vocational divide (Nylund et al., 2017), and thus the social class divide, through differentiated entry and exit points, access to different types of knowledge and unequal access to higher education.

In light of the enrolment patterns in upper-secondary education, the growing divide between the academic and the vocational can be expected to increase class inequalities in a number of ways. Vocational programmes are increasingly geared towards "workplace relevance", and thus the actual and potential vertical elements of the knowledge they offer seem to be diminishing. It appears as if contemporary policies and curricula are much more concerned with creating "employable" workers than in nurturing active citizens or workers who will have their own ideas about shaping the workplace or promoting equality. Scrutinising the pedagogical practices in the three countries makes it clear that there are few examples in which vocational education is oriented towards knowledge practices that emphasise more general elements, such as when particular workplace tasks are related to general understandings of influence, moral choices and construction at workplaces and in society in general. This conclusion is strengthened by the pattern of individualised pedagogical practices that is common to vocational programmes, especially in maledominated trades. The individualised practices offer fewer opportunities to learn from the experience of others, to participate in public discussions, and thereby those practices deliver a less rich perspective. In short, our results suggest that contemporary trends represent greater exclusion of vocational students from "society's conversation" about itself.

Moreover, the academic-vocational divide is also strengthened by schools' marketing to different groups of students, especially in Sweden (Dovemark & Holm, 2017). The Nordic countries seem to follow what López-Fogués (2012) concludes to be a trend for VET policy at EU level, that social justice is constantly condemned to second place.

López-Fogués' (2012) conclusion draws attention to what is considered to be progressive. The Nordic countries have, for a long time, differed somewhat from other European countries in how social justice has been seen as a driving force within progressiveness. Our analysis shows that progressiveness has seemingly changed in favour of capitalism and marketisation (cf. Lundahl et al., 2010, 2013). Those elements have always been included in vocational education and training since VET per se is closely connected to the means of production, which is often seen as inseparable from "the market" and capital (cf. Avis, 2016; Young & Gamble, 2006). However, the emphasis has clearly moved more from the former to the latter.

Contemporary trends polarise gender differences in a number of ways and, as found in studies of other European contexts, seem to foster certain kinds of working-class masculinities and femininities (Colley, 2006; Connell, 1991; Moret, Dümmler, & Dahinden, 2017). Even if vocational programmes always appear to have been considered "male education"

(Jónasson, 2003; Odih, 2007), it might be argued that current trends imply that certain vocational programmes are becoming even more male dominated. Furthermore, the differences between vocational programmes are accentuated by contemporary trends in which those programmes dominated by females are geared more towards higher education than programmes dominated by their male counterparts, as in most European countries (see Reisel, Hegna, & Imdorf, 2015). Another likely hypothesis is that, since the labour market is highly segregated in terms of gender, the trend of gearing vocational programmes towards employers' needs will further accentuate gender differences. Since the trend is for vocational education to be steered towards employers' needs, it appears that primarily the masculinities and femininities of the working class are likely to be strengthened, more so than academic programmes, some of which are almost gender-neutral.

If, as we argue in this paper, the academic-vocational divide and the social positions it upholds are part of the problem - contributing to the lower status, the lower expectations, and the classed and gendered character of upper-secondary vocational programmes - then contemporary trends are reinforcing these problems instead of solving them. The students who occupy these social positions in vocational programmes are faced with many structural factors beyond their power to influence. The problems associated with vocational programmes should not be attributed to the students; rather, the problems should be understood as primarily societal, with the academic-vocational divide as a manifestation of them.

Notes

- 1. The numbers refer to students enrolled in programmes leading to an exam. Students entering preparatory programmes are, thus, not included; examples include introductory programmes in Sweden. Preparatory programmes are in many ways interesting in a social justice context, however they are, for reasons of focus and depth, excluded from this paper. In addition, these numbers are approximate since the educational structures in the countries differ and thus so do enrolment patterns. The numbers are derived from official statistics for the years 2015-2017 (FNBE, 2016; Statistics Finland, 2015a, 2015b; Statistics Iceland, 2016a, 2016b; Swedish National Agency for Education, 2017). The Icelandic numbers are based on the whole population (regardless of age) enrolled in upper-secondary schools, while the numbers pertaining to "proportion of students in programme types" in Finland and Sweden are based on applicants from lower-secondary schools.
- 2. For a description of JustEd, see the guest editorial paper in this special issue.

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Notes on contributors

Mattias Nylund is Assistant Professor of Pedagogy at Gothenburg University. His main research interest is in curriculum theory and sociology of education, with particular focus on how education policy reflects and affects class and gender relations. He is currently working within the project "Critical education in vocational subjects?"

Per-Åke Rosvall is Associate Professor of Educational Work at Umeå University, with special reference to sociology of education at Umeå University. He is currently working within the projects "Rural youth, Education, place and participation" and "Critical education in vocational subjects?"

Elsa Eiriksdottir is Assistant Professor at the University of Iceland, School of Education. She holds a PhD in engineering psychology from Georgia Institute of Technology. Her research interests include learning, transfer of training, skill acquisition, and vocational education and learning.

Ann-Sofie Holm is Assistant Professor of Pedagogy at the University of Gothenburg. Her research field is sociology of education with focus on aspects of democracy and inclusion in school. In her recent research projects she has explored the marketisation of the Swedish education system, upper-secondary school choice as well as constructions of masculinities and femininities.

Ulpukka Isopahkala-Bouret is an Associate Professor at Centre for Research on Life Long Education (CELE), University Turku. Her specific research topics include social divisions in Nordic higher education, ageing and educational credentialing, professional expertise and agency.

Anna-Maija Niemi is a postdoctoral researcher at the University of Helsinki, Faculty of Educational Sciences. Her research interests are located in the fields of sociology of education, youth studies and disability studies in education. She is currently working in the research project "Employability, education and diversity".

Guðrún Ragnarsdóttir is Assistant Professor, teacher educator, and project manager in professional development at the School of Education, University of Iceland. Her specialities are leadership and educational change in upper secondary education.

ORCID

Mattias Nylund http://orcid.org/0000-0003-0530-6378 Per-Åke Rosvall http://orcid.org/0000-0002-3737-3244 Elsa Eiríksdóttir D http://orcid.org/0000-0001-8606-4256 Ann-Sofie Holm http://orcid.org/0000-0002-9025-4666 Ulpukka Isopahkala-Bouret http://orcid.org/0000-0002-8535-8874 Anna-Maija Niemi http://orcid.org/0000-0002-5133-2086



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