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Justice and marketization of education in three Nordic countries: can existing large-scale datasets support comparisons?

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ABSTRACT

Traditionally emphasizing justice, equality and inclusion, education policies in the Nordic countries have incorporated neoliberal features during the last three decades, but to varying extents. These changes have important, multidimensional implications, but the variations have been addressed in few comparative Nordic studies. Thus, this article explores the potential to strengthen comparisons of education regimes in the Nordic countries generally, and social justice and marketization aspects more specifically, by using existing datasets and databases. It initially elaborates the concepts of justice and marketization of education. Using Iceland, Norway and Sweden as examples, it explores the relevance, accessibility and comparability of some of the larger international and national statistical databases, and hence their potential to enable such comparisons. These data are complemented with interviews conducted with officials at the national agencies of education in the three countries. A main conclusion is that abundant data are generally available (despite substantial gaps and silences in the datasets) on various aspects of social justice in education. In contrast, there is very little data on most aspects of marketization. Comparability is often hindered by factors such as differences in definitions, white spots and the organization of education. It is concluded that there is clearly a need to extend and develop the currently limited Nordic collaboration in the selection and harmonization of educational statistics.

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Introduction

The education policies of the Nordic countries have traditionally prioritized social justice and cohesion by providing universal schooling of high and equal quality. However, major changes have occurred, mainly in the last 30 years and most strongly in Sweden (Arnesen & Lundahl, 2006; Lundahl, Erixon Arreman, Holm, & Lundström, 2013). The 'Nordic educational model' (Telhaug, Mediås, & Aasen, 2004) has been increasingly challenged by a market model, resulting in an intriguing hybrid of universalistic/social democratic and specialized/neoliberal policy features (Esping Anderson, 1990; Silver, 1994). Today, the balance between traditional components of social justice (e.g. educational equality and inclusion) and marketization (e.g. school choice and privatization) varies considerably between the five Nordic countries (cf. Blossing, Imsen, & Moos, 2014; Lundahl, 2016). For example, universal access and high-quality education are basic aims in all of them. However, research and evaluation reports display growing differentiation of the recruitment to schools and increasing differences between them, particularly in the urban regions, for example, with regard to students' performance, socio-economic and ethnic backgrounds, and special educational needs. Such studies are commonly either based on

quantitative analyses of large datasets (e.g. Musset, 2012; Östh, Andersson, & Malmberg, 2013; Wondratschek, Edmark, & Frölich, 2014) or in-depth analysis of smaller samples or cases (e.g. Bjordal, 2016; Bunar & Ambrose, 2016; Kosunen & Seppänen, 2015). To what extent researchers who conduct qualitative studies on these matters can find available large-scale data allowing for comparisons between the Nordic countries with regard to the scope of marketization on the one hand, and different aspects of justice on the other, is however less discussed.

We believe that valuable insights could be obtained from comparisons of the Nordic countries regarding efforts to promote justice in education, manifestations of marketization, and their interactions in the different national contexts.¹ Furthermore, we assume that good quality statistical data could not only help efforts to discover important commonalities and discrepancies (e.g. between nations and over time), but also strengthen the contextualization and robustness of qualitative analyses of Nordic education (cf. Maxwell, 2010). Equally important, qualitative analyses may validate, enrich and critically challenge (thereby enhancing) large-scale datasets. However, there have been few comparative studies on education and education policies of two or more Nordic

countries, particularly studies involving use of both qualitative and quantitative data.² This may be partly due to difficulties in using national and international statistical information for such comparisons. These difficulties may be of practical nature, for example, methodological and technical problems, differences in educational organizations, lack of longitudinal data, and business legislation prohibiting public access to data on private school companies (cf. Simons, Lundahl, & Serpieri, 2013). The need to ‘translate’ the generalized de-contextualized statistical data of International Large-Scale Assessments (ILSAs) when applying them in specific contexts may pose further difficulties (cf. Lindblad, Pettersson, & Popkewitz, 2015). These obstacles highlight a need to assess whether available large-scale datasets can be sufficiently harnessed for desired comparisons or new datasets should be compiled.

Crucial considerations include the ontological and epistemological assumptions underlying statistics and comparisons by numbers. According to Desrosières (1998), researchers tend to regard them either as ways to describe and analyse an objective reality or as socially constructed categories. Our point of departure is that statistical categories and indicators are social constructions that highlight certain aspects and neglect or hide others, their foci and omissions varying between social contexts and over time (cf. Desrosières, 1998; Lindblad et al., 2015). We recognize that statistics intervene in the social contexts they describe; they discipline and authorize, for example, by serving as starting points of quality deliberations and tools for auditing and controlling schools and teachers’ work (Espeland & Stevens, 2008; Goldstein & Moss, 2014).

In policy and administrative practice, statistics are widely regarded as compilations of facts that may serve as a basis for action (Desrosières, 1998; Espeland & Stevens, 2008; also cf. Carlhed, 2017). Enabling soft governance by comparisons based on seemingly objective measures, statistical indicators and databases constitute core elements of contemporary education policies at global, European and national levels (Lawn & Grek, 2012; Lindblad et al., 2015; Sellar & Lingard, 2014).

The International Association for the Evaluation of Educational Achievement (IEA) was founded in 1959 by researchers aiming at enabling international-comparative analyses and explanations of education achievement. From the 1990s, the work of the IEA however became more descriptive and the research purpose less prominent (Gustafsson, 2008). Today the ILSAs – notably the IEA studies TIMMS (Trends in International Mathematics and Science Study) and PIRLS (Progress in International Reading Literacy Study) and, not least, OECDs PISA programme (Programme for International

Student Assessment) – are largely policy-driven. This is also true for the large education databases compiled by UNESCO³ (UIS), the European Commission (Eurostat) and the OECD.⁴ Economic and political globalization have resulted in increasingly synchronized statistical measures and data collection even in the field of education (Cussó & D’Amico, 2005; Goastellec, 2011; UOE, 2016). The ILSAs primarily focus on outcomes and performance, and relate them to background variables, such as students’ gender and socio-economic background. As highlighted by Gustafsson (2008), there are difficulties in establishing causal links between such variables, which politicians are often eager to do. However, PISA, TIMMS and other databases provide carefully generated and validated data, obtained using sophisticated sampling designs, and offer possibilities to increase explanatory power by adding national-level longitudinal and qualitative data (ibid). He therefore concludes that the international studies *may prove to be exceptionally beneficial for the quality of educational research* (Gustafsson, 2008, p. 16).

In summary, it is important to recognize both the advantages of available datasets and problems posed by their imperfections and incompatibilities.

Aim and structure of the article

The aim of this article is to explore the potential for strengthening comparisons between the Nordic countries of education regimes generally, and aspects related to social justice and marketization more specifically, using existing large statistical databases. Our key questions are:

- *To what extent do available statistical data on Nordic education allow for analyses and comparisons with regard to social justice and marketization of education?*
- *What could increase the utility of existing datasets for comparisons of education in the Nordic countries?*

For practical reasons, we target compulsory education and focus only Iceland, Norway and Sweden when examining national contexts.

In the following sections, we initially describe our methods of data collection and analysis, then outline and concretize the conceptual framework. The major part of the article is devoted to an analysis of some of the larger available statistical datasets and indicators of social justice and marketization in the Nordic countries. We pay particular attention to the relevance, comparability and accessibility of the data. Finally, we present some concluding remarks and recommendations.

Procedures and sources

The initial work concerned definitions, delimitations and concretizations of the two key phenomena concerned: social justice and marketization of education. This will be elaborated in the section *Conceptual framework and indicators*. At a second stage, we identified a number of potential datasets and explored the extent to which they contain data that might assist analysis. The sources mainly consisted of international statistical databases and register, assessment and survey data from large relevant international organizations (OECD, UNESCO, EC,⁵ IEA⁶) and the national educational statistics of the Nordic countries, exemplified by Iceland, Norway and Sweden (Table 1).

When exploring the selected datasets, we assumed the following aspects to be particularly important: *relevance* in relation to the aim of the study, *comparability across the Nordic countries*, and *accessibility/transparency*. At the end of the study, we conducted structured interviews with leading representatives of Statistics Iceland, the Education Directorate in Norway and the Swedish National Agency for Education (see reference list for information on the respondents), aiming to clarify if and to what extent there is a Nordic collaboration and coordination of collecting statistical data on education.

Conceptual framework and indicators

In this section, we elaborate on our use of the core concepts: justice and marketization. Departing from Fraser (2003), we distinguish between and concretize three dimensions of social justice: redistribution, recognition and political representation, but also add the dimension of well-being. In a similar way, we identify and concretize four dimensions of marketization: school choice, competition, privatization and commercialization.

Social justice in education

Definitions of justice, equality and inclusion tend to partly overlap, and are commonly used interchangeably. However, the concepts have different origins and are

elements of partly differing political discourses (e.g. Riddell, 2009; Silver, 1994). Historically, (in-)equality has been primarily connected to social class and a major concern of egalitarian politics has been the (re-)distribution of resources. ‘Social inclusion’ and ‘exclusion’ emerged as major concepts of policies and research in the 1980s and 1990s. In 2001, the European Commission and the European Council adopted the *Joint Inclusion Report* which defined inclusion/exclusion in terms of participation and access to resources, rights, goods and services for all citizens, and promotion of participation and self-expression of the excluded (Silver & Miller, 2003). The report also involved identity politics and the recognition of diversity by highlighting categories other than class, for example, gender, ethnicity, disability, sexual and religious orientation. At the same time, neoliberally influenced and ‘third way’ politics have coupled social justice and equality with features such as efficiency and competitiveness into a ‘policy assemblage’ (Rizvi & Lingard, 2011), so that in effect they have acquired new meanings (Arnesen & Lundahl, 2006; Salvage, 2013).

Social policy researchers Burchardt and Vizard (2007)⁷ merged the concepts of equality and inclusion in the following capability-based definition of equality:

An equal society protects and promotes equality of valuable capabilities – the central and important things that people are able to do and to be – so that everyone has the substantive freedom to live in ways that they value and choose (and have reason to value and choose). (Burchardt & Vizard, 2007, p. 3)

Similarly, several policy actors have sought to combine redistributive and recognition orientations (OECD, 2008, 2014; UNESCO, 2009), and include both fairness⁸ and inclusion, when defining equity of education.

Hereafter, for analytical purposes, we use distinctions presented by Fraser (2003) between three dimensions of *social justice*: redistribution, recognition and political representation, although recognizing that the dimensions are overlapping and interdependent. The redistributive dimension relates to socio-economic structures and the distribution of material conditions and resources. It is closely linked to the concept of equality/inequality. The recognition dimension, closely associated with inclusion/exclusion, relates to cultural and symbolic values and the recognition of socio-culturally based differences. The political dimension of justice concerns representation, in terms of participation in society (Fraser, 2003, 2008; Keddie, 2012).⁹ We distinguish five sub-categories: two related to redistribution (access, resources), two related to recognition (curriculum, integration/separation) and one to representation (voice). For the future, we suggest adding well-being/quality of school life as an important aspect of justice in education. Clearly, some of the categories

Table 1. National and international databases selected for exploration (stage 1).

	National	International
Register data	National official statistics National statistics on municipalities and regions: – Norway: GSI, KOSTRA – Sweden: KOLADA	Eurostat (EU) OECD database UIS (UNESCO) EASIE Nordic Statistics (Nordic Council of Ministers)
Assessment data	UIS	PISA (OECD) TIMSS, PIRLS (IEA)
Survey data		PISA (OECD) ICCS (IEA) HBSC (WHO)

List of acronyms: see Appendix A.

are relatively easy to quantify and include in register data, particularly the redistributive categories access and resources, while others, such as recognition and participation/voice would largely have to be covered by surveys, if they can be captured in large-scale datasets at all. Table 2 summarizes and gives examples of indicators of the different aspects of social justice.

Redistribution/(in-)equality: access to education and educational resources

Social justice in terms of redistribution relates to socio-economic structures and the distribution of material conditions and resources. Education and schools are major institutions of selection and, hence, determinants of stratification in the labour market. As providers of access to the labour market, they are potentially both crucial mediators of integration, and (when access is blocked) mediators of marginalization that can severely impair students’ life chances (Frønes & Strømme, 2010). Hence, equal access to and participation in education are central aspects of social justice. Redistribution in terms of resources is strongly associated with the quality of education inputs to disadvantaged schools and students to promote increases in school participation and achievement. The distribution of institutional resources and measures also reflects the relative status of the students; constituting some students as norms and others as deficient and inferior, thereby connecting to the aspect of recognition (described below).

Recognition/inclusion-exclusion: curriculum and integration/separation

Educational policies and practices strongly influence students’ relative standings through the workings of educational institutions and the curricula, which define what is valued, e.g. what counts as high or low status knowledge. The increased academization of education and weakened status of practical and aesthetic subjects over the last two decades are cases

in point (Imsen, 2004). Curricular design may contribute to inclusion or exclusion, through content, pedagogy and ways of organizing the students. A diversity-sensitive curriculum requires provision of culturally inclusive learning possibilities, which take into account the diversity of students and individual needs (e.g. environmental accommodations, curriculum content, instructional differentiation, language of instruction, personal attention and commitment by teachers). One of the criteria for an inclusive school is that the teachers and students value diversity, so any analysis of inclusivity in education should consider the degree to which school curricula and teacher education actively promote appreciation of diversity.

Representation: voice

The *dimension of representation* refers to participation, a policy term that has attained formal right status (UN, 1990) and is included in the education legislation of the Nordic countries. This implies acknowledgement of the students’ agency as social actors and role as co-constructors of their educational experience and environments. Representation/voice includes formal and informal participation in decision-making, both as part of student democratic representation in school boards and similar bodies, and individuals being listened to and influencing what goes on in the classroom and everyday life in schools.

Well-being: quality of school life

The aspect of well-being cuts across the various dimensions of social justice. Considering the dramatic increase of interest in well-being, both at international level (EU, OECD and UN) and nationally, it may be useful to present it as a separate dimension (cf. Bache & Reardon, 2016). Well-being has been defined and measured in different ways, but is generally understood as the quality of life, in terms of both objective factors, such as material circumstances, educational resources and health status, and

Table 2. Dimensions of justice and examples of indicators.

Dimension	Aspect	Examples of indicators
Redistribution/(in-)equality	Access to education	- Level of participation in education - Selection/non-selection of students - Free of charge schooling/school fees - Absenteeism - Completion/dropout - Transition to HE
	Educational resources	- Funding and resources to disadvantaged schools and students to support increased school participation and achievement - Distribution of qualified teachers, facilities, textbooks, ICT
Recognition/inclusion-exclusion	Curriculum	- Provision of culturally inclusive learning possibilities - Fostering students’ valuing of diversity
	Integration/separation	- Integration or separation of students according to e.g. class, gender, disability, ethnic origins
Representation	Voice	- Student representation in school boards and other bodies - Students are listened to and have an influence on what goes on in the classroom and school’s everyday life - Preparation for active participation and influence in society

subjective ones, such as thriving and happiness (or lack thereof) and perceptions of quality of life in particular contexts (c.f. Yoon & Järvinen, 2016). Whereas standards of living are mostly expressed by an index of resources, well-being refers to the positions and experiences of individuals and groups in particular sets of domains (Frønes, 2007), for example, education. Well-being is sensitive to context (institutional, sociocultural and historical) and when considering children, it concerns both their present (being) and future (becoming) (Ben-Arieh, 2006; Ben-Arieh, Casas, Frønes, & Korbin, 2014). Here we will however not go deeper into meanings and concretizations of well-being; we just want to point at this as a relevant aspect of social justice.

Marketization of education

For analytical purposes, we distinguish between four subcategories of educational marketization, although they may often partly coincide in reality: school choice, competition, privatization and commercialization (Linick, 2014; Molnar, 2006). In many countries, competition and school choice are enacted in an organizational field with both public and private (increasingly commercial) players (Ball & Youdell, 2008). However, school choice, competition and commercialization are also present in countries where education is almost completely provided by public players, for example, Norway and Finland (cf. Berge & Hyggen, 2011; Bjordal, 2016; Blossing et al., 2014; Kosunen & Seppänen, 2015). In the following sections, we briefly discuss the subcategories. Table 3 summarizes and exemplifies indicators of the different aspects of marketization of education.

School choice and competition

The concept of school choice focuses on the demand side of education, while competition refers to a

relationship between actors on the supply side (cf. Linick, 2014). School choice is a prerequisite of competition, but in principle it is also possible to construct choice-based systems that are not linking choice to economic incentives such as vouchers. They therefore minimize or do not result in competition. Conversely, competition can take place without a system of school-choice; schools can, for example, compete over teachers, awards and so on.

School choice and competition are often measured in terms of numbers of students in private schools, also called independent or free schools, in a municipality or catchment area. This is based on the unspoken assumption that competition occurs in a market involving private providers. However, competition and choice may take place mainly *within* the public system, or also include private schools. School choice may concern schools outside the municipality. In this report, it refers to parents and young people choosing between schools, public or private, within or outside their municipality or catchment area (cf. Linick, 2014; Lundahl et al., 2013; Lundahl, Erixon Arreman, Holm, & Lundström, 2014; Wondratschek et al., 2014).

Privatization and commercialization

Privatization here refers to allowing private actors to provide education on a regular basis. Commercialization of education denotes the increasing participation of business, for-profit actors in the education sector. Using Molnar's distinction, commercialization of education is about selling to schools (vending), selling in schools (advertising and public relations) and selling of schools (Molnar, 2006. C.f.f. Verger, Lubienski, & Steiner-Khamsi, 2016).

The emerging picture

Educational researchers who want to utilize available datasets for Nordic comparisons may consult either national statistics, to acquire national, regional and/or local level information, or databases of international organizations, particularly those compiled by the OECD, the UNESCO, the European Commission and the IEA. In addition, more temporary project-based databases may be available. The existing databases contain data obtained from registers or assessments, and/or information drawn from surveys of the perceptions of individuals (e.g. students, teachers and head teachers) regarding, for example, educational and health conditions. Since 1993, the UIS, OECD and Eurostat databases ('UOE') have also annually compiled a large common set of data on education obtained from national statistical agencies (OECD, 2017a; UOE, 2016). In addition, each of the three international organizations collates its own statistical information. Moreover, the IEA has developed a tool, the International Database Analyser, that facilitates

Table 3. Dimensions of marketization and examples of indicators.

Dimension	Examples of indicators
School choice	- Proportion of students in schools outside of the catchment area but within commuting distance
Competition	- Numbers of schools open to school choice in a municipality or at commuting distance - The existence of a voucher system or similar
Privatization	- Proportion of private tax-funded schools in a municipality or at commuting distance - Proportion of public educational services (e.g. staffing, ICT, cleaning, school meals, school buses) on contracts by private providers
Commercialization	- Advertising, e.g. connected to private sponsoring of schools - Selling learning material (e.g. textbooks, ICT hard- and software, buildings), programs for e.g. health promotion, entrepreneurial education) - Outsourcing of public schools to private actors - Profit-making in privately run, tax-funded schools

analyses of its own and other large-scale assessment datasets, for example, from PISA.¹⁰

The interviews with leading national representatives of the Icelandic, Norwegian and Swedish agencies, mentioned earlier, provided information about informal Nordic contacts, particularly in connection with the annual delivery of data to the UOE. Since 2014, there have also been informal annual meetings to discuss and exchange information about technical aspects of the acquisition and processing of education statistics in the Nordic countries. However, there are no systematic collaborative attempts to increase the comparability of the Nordic countries' statistics. A set of indicators, called the Nordic Welfare Indicator System (NOVI), has been established to monitor and compare welfare in the Nordic countries, but it only marginally covers education. Two bodies, NOSOSCO (Nordic Social Statistical Committee) and NOMESCO (Nordic Medico-Statistical Committee), promote Nordic cooperation in handling data, but neither compile much educational data, and mostly utilize data from other sources.

Accessibility

At one end of the accessibility spectrum, the data contained in a database may be completely available and easily accessible to anyone, while at the other end access may be strongly inhibited by requirements for registration and admission, license fees, or even legal barriers. In some cases, permission to mine and process data can be obtained from the relevant authorities, for instance, staff at the national statistical bureaus, normally for a fee. Many of the databases explored here are completely open, but sometimes access to the rich data is curtailed. In some academic surveys, there is a temporal embargo, sometimes lasting several years, even after admission as a user. For example, data in the WHO's Health Behaviour in School-aged Children (HBSC) database are fully available after 3 years following a special application, and otherwise after 5–6 years.¹¹ In such cases, the legal or other impediments to collecting data pose substantial challenges. Furthermore, the accessibility of a database depends on the comprehensibility of its contents and transparency, such as its *linguistic transparency*. For example, presentation of national statistics in Icelandic or Finnish clearly restricts access to potential Nordic users who do not understand these languages. We discuss other aspects of transparency, clarity and consistency of definitions, in the section on comparability below.

Comparability

At a general level, comparability of international and national statistics may be limited by factors such as differences in definitions (see the notes on definitional consistency below), white spots and variations

in educational organization. Public statistics from the Nordic countries are generally stable and span long time periods, which increase possibilities of comparisons over time. However, they reflect somewhat different educational conditions and foci of the five countries. For example, comparing transitions from compulsory school to upper secondary level education (a vital aspect of access to education) is challenging because of differences in the Nordic countries' organization of academic and vocational tracks, as well as apprenticeship training (Helms Jørgensen, Olsen, & Persson Thunqvist, 2018). Moreover, the Nordic datasets available in English are usually limited, so comparisons may be hampered by language difficulties.

Consistent inter-country comparisons are enabled in the recurrent surveys and assessments designed by powerful international bodies, not least OECD's PISA, but they typically rest on smaller samples and are conducted at longer intervals than, for example, the annual national statistics. Moreover, PISA questionnaires may include optional questions, so some types of data available for other countries may be missing for some or all of the Nordic countries, which may greatly hinder comparisons.

Clarity of definition refers here to the lucidity of the definitions of variables included in the databases. Terms like child-care, private education, dropout, school completion or vocational education used in the registers, or competency levels in the assessment projects, may be interpreted in various ways. For example, completion of compulsory education in the 9th or 10th grade means different things in the Nordic countries. Similarly, the wording of survey questions may be open to interpretation, effectively prompting people to respond to different questions. A strongly related issue is the *consistency or coherence of definitions*. The collected data emanate from reports from institutions (e.g. schools) or communities that may not collect or understand the requests for data in an entirely consistent manner.¹² For example, in what sense is a pre-school a school, and does the term have the same connotations in different systems? Do school attendance, school completion and school leaving (or dropout) have different meanings, even in systems that seem structurally similar?¹³ Lamb, Markussen, Teese, Sandberg, and Polese (2011) clearly demonstrate the challenges of comparing such phenomena in somewhat different cultures, mainly due to differences in definitions of the terms.

In the rest of this article, we discuss the potential of large national and international databases to complement qualitative analyses of educational justice and marketization in the Nordic countries. We found that three of the databases listed in Table 1 (the *Nordic Statistics*, PIRLS and TIMMs databases) have little relevance for such analyses, so we exclude

them from the discussion. The Nordic statistics database, compiled by the Nordic Council of Ministers (2017), only includes a few rather crude educational indicators related to the focal issues in this article: enrolment and levels of education, in both cases stratified by educational level, age and sex.¹⁴ The student, teacher and school survey data of the PIRLS and TIMSS databases only provide a little information about social justice matters, and none related to the marketization of education. The remaining datasets (Table 4) are first explored with regard to social justice, and subsequently to marketization of education. When considering national data collection and datasets, we draw illustrations from Icelandic, Norwegian and Swedish statistics. Finally, we discuss the main conclusions from the exploration.

Data on social justice of education

National register data

The datasets that could potentially provide the most detailed information about the redistribution/equality aspects of education in the five Nordic countries are their own official statistics. These provide the most fine-grained data at not only national and regional levels, but also local levels, which is important for addressing regimes in societies with high local discretion, as in the Nordic countries.

The designs of the searchable databases are rather similar. All three countries provide extensive information on students' access, performance and completion – always in relation to gender, and sometimes in relation to location and immigrant background. Parents' level of education is usually reported, but otherwise information on the students' socio-economic backgrounds is lacking, which means that class matters tend to be silenced. Reflecting the fact that Sweden has the by far highest proportion of immigrant students, Swedish national statistics has also more extensive educational data on this aspect than Norway and Iceland. Since 2014, Swedish official statistics have reported the scope and forms of so-called special support (more extensive support

than can normally be provided in ordinary class teaching) based on individual data, and in terms of grade, gender and educational provider.¹⁵ The Norwegian official education statistics report similar data at national, regional and local levels, but provide more detailed information on special education, for example, the time of instruction received in special education, and numbers of students receiving instruction in sign language and Braille.¹⁶ The numbers of students who receive instruction in languages other than Norwegian and/or bilingual instruction are reported, also per language. Icelandic public statistics are somewhat less fine-grained, for example, they include data on students in compulsory schools having a mother tongue other than Icelandic, stratified by language and region, and data on students (boys, girls) receiving special education in the ordinary classroom, in separate classes or both.

International databases

Producers of the largest international databases are increasingly addressing social justice and well-being issues. The indicators of social justice largely address redistribution – access to education and the distribution of resources. In particular, the PISA Database (2000–) offers a rich dataset that allows measurement and comparison of educational equality in terms of assessment performance of 15-year-olds in relation to factors such as socio-economic resources, gender, cultural capital, ethnicity and geographical location. The PISA database also contains survey data based on responses of students, principals and, from 2006 onwards, parents. However, the data collected in the triennial PISA assessments has not been completely consistent, which may hinder comparisons (see also the section on comparability below).

The recognition aspect, notably integration/separation of students, is less easy to capture. For example, the degree to which students are integrated in mainstream classes or separated with regard to ability or minority background, is seldom addressed. Similarly, the data on the extent to which different countries prepare students for active participation and influence in society are sparse. In contrast, there is a host of comparative data on well-being from various sources.¹⁷

The UNESCO Institute for Statistics (UIS) has a long-standing focus on social justice matters, manifested by the variables covered in its data collection, annual publication *Global Education Monitoring Report*, and establishment of the World Inequality Database on Education (WIDE)¹⁸ database in 2012. Building on a multitude of sources and kinds of data, WIDE addresses inequality with regard to school attendance, transitions and completion rates stratified by, for example, wealth, gender, ethnicity and

Table 4. National and international databases selected for exploration (stage 2).

	National	International
Register data	National official statistics National statistics on municipalities and regions; – Norway: GSI, KOSTRA – Sweden: KOLADA	Eurostat (EU) OECD database UIE (UNESCO) EASIE
Assessment data	UIE	PISA (OECD)
Survey data		PISA (OECD) ICCS (IEA) HBSC (WHO)

List of acronyms: see Appendix A.

geographic location. However, it is more suitable for providing popularized overviews of the global situation for decision-makers and the public than useful data for research.

The OECD is also paying increasing attention to justice in education, as shown by the reporting of the PISA 2015 assessment: Volumes I and III specifically address equity and student well-being, respectively (OECD: PISA, 2016a, 2016b, 2016c). The recurrent OECD publication *Education at a glance* also includes rich material on various social justice issues, and recently the OECD has undertaken a special study on well-being (OECD, 2017b). The 2018 World Development Report by the World Bank (World Bank 2018) is dedicated solely to education for the first time and presents data on a number of aspects of equity, drawn from a multitude of sources, including the UIS and OECD PISA.¹⁹

Eurostat provides less detailed information about education, but publishes a number of reports on the subject, most of which focus on older children, adolescents and young people.²⁰ Several reports highlight young children at risk, but they have little connection to the education part of the database. The EU centre Eurydice gathers extensive data on systems and policies, then prepares country reports and an overarching background report ('Monitor') covering all the Nordic countries to assess progress towards EU2020 benchmarks for the European Commission (European Commission/EACEA/Eurydice, 2016). However, its reports do not cover Iceland or Norway (European Commission, 2017). The 2017 Monitor focuses on *inequality in education and the important role that education can play in building fairer and flourishing societies* (ibid. p. 2).

A couple of specialized databases target important aspects of our field of interest. One is IEA's recurrent International Civic and Citizenship Education Study (ICCS), a survey that provides rich data on the participation/voice aspect. The other, coordinated by the European Agency for Special Needs and Inclusive Education (EASIE),²¹ addresses matters of integration and separation of children. However, the latter clearly reflects the major difficulties in comparing special needs support and related divisions and integrations, even between the Nordic countries. In addition, there seems to be long intervals between data updates.

Several international research projects focus on schoolchildren's well-being, for example, the HBSC project and the European School Survey Project on Alcohol and Other Drugs (ESPAD). Datasets generated in both of these projects include data that are valuable for understanding the lives and well-being of school-aged children, and cover variables that are highly relevant to social justice issues in education.

In conclusion, the biggest international databases on education (those of UNESCO, the OECD and the

EC) hold extensive and increasingly converging data that are available for international and Nordic comparisons. The databases include comprehensive data on social justice in education, particularly distributive/equality and well-being aspects. Other major aspects of social justice (recognition and voice) are substantially covered in some international surveys, including two series (PISA and ICCS) we have explored. In addition, an interesting initiative to develop international surveys addressing education equity, in response to with the UN's 2030 Agenda for Sustainable Development warrants attention. In response to calls, for instance, in the 2030 Agenda for Sustainable Development for a greater focus on equity, three major global players (the UIS, UNICEF and the World Bank) formed an Inter-Agency Group on Education Inequality Indicators (IAG-EII) in 2016 (UIS, 2016a). The aim was *to promote and coordinate the use of household survey data for education monitoring at the national, regional and global levels* (UIS, 2016b). The Inter-Agency Group's evaluation of the present data situation is worth quoting:

Under the Millennium Development Goals, education indicators mostly relied on administrative data and global monitoring of inequality mainly captured differences by sex. While the value of this data is universally recognized, survey-based indicators will need to feature more prominently to enable broader equity-oriented global monitoring efforts. The Education 2030 Framework for Action calls for all countries to "collect, analyse and use disaggregated data, broken down by the specific characteristics of given population groups, and ensure that indicators measure progress towards reducing inequality." (UIS, 2016a, p. 1)

Accordingly, the terms of reference outline ambitious work and collaboration in line with the aim of the IAG-EII, including *harmonizing the processing of survey data by different agencies* (UIS, 2016c, p. 1)).

Marketization

Nordic register data

As was discussed earlier, the national register data are reflecting social justice aspects, in particular equality of education. In contrast, data on marketization are sparse and mainly concern the private-public aspect. *Parental/student choice of school*: Sweden has the most extensive data in this respect, which is not surprising, considering the rapid marketization and privatization of education that has occurred here since the mid-1990s. The SALSA database of the Swedish National Agency for Education (SNAE) annually provides public, easily accessible data on proportions of students in public and private ('free') schools at national and municipal levels, and the proportion of students who attend a municipal or

free school outside of their own municipality. Similarly, Statistics Norway (StatBank Norway) provides annual information on ownership of schools at national, regional and local levels. In Iceland, the number of students attending different types of school can be deduced from their home postcodes. Such data are available from Statistics Iceland, but are not published on the web. The 2009–2015 PISA rounds included an optional parent questionnaire, asking *inter alia* about the importance of various factors for choosing a school for their children. However, none of the Nordic countries chose this option.

Competition between schools: The statistics referred to above also offer a possible measure of competition between schools: the number of public and private schools within a municipality. However, such a measure must be related to the national preconditions of choice, for example, the existence of vouchers, fees and so on. *Selection/non-selection of students:* All the Nordic countries introduced comprehensive compulsory school systems in the 1960s and 1970s, which did not in principle allow student selection. However, allowing various forms of profiled schools (public and in some of the countries private) and parental choice of school for children has resulted in largely socio-economic selection for the most popular schools. In Sweden, for example, some of the most resourceful and proactive parents apply for places in these schools just after birth of their children. All the PISA investigations have included a question for principals on how often they consider certain factors when students are admitted to their school, for example, academic performance and recommendations from feeder schools. No such datasets have been systematically collected in the Nordic countries.

International databases

As already mentioned, the big international producers and collectors of large-scale datasets are showing strongly growing interest in education equity indicators and data, but are paying much less attention to the various aspects of marketization of education. International databases often contain information about the proportion of private costs for education, but at a very high level of aggregation that makes it difficult to separate components such as tuition fees paid by parents, private donations and firms' investments in schools. The PISA database constitutes an exception to the major tendency to overlook competition; in 2006–2012, principals of the targeted schools were asked to estimate *competition*, measured as the number of competing schools in their neighbourhood. The parents' questionnaire contained the same question in 2009–2015. However, respondents in the Nordic countries did not answer this optional

question. *Privatization:* All the PISA studies contain survey data on the proportions of students in public and private ('free') schools. In the latest study, PISA 2015, volume II is dedicated to governance of education, including issues of choice and private–public involvement.

Conclusions

Our results show that there is an abundance of both register and survey data at international and national levels related to justice in education, but very little related to marketization. Thus, there is potential to use the existing databases and datasets for strengthening qualitative comparative studies of different aspects of social justice in education, but not (yet) for such studies of marketization aspects. However, using our theoretical/conceptual framework, we identified considerable difficulties and gaps, even in relation to the aspects of educational justice. Redistribution-related information tends to be relatively abundant in register data, but there is sparse (albeit systematic) information on the social justice aspects of recognition/inclusion, health/well-being and representation/voice in available survey data. We also note increasing interest from the international actors in covering welfare and justice aspects, and the interesting recent initiative to establish an Inter-Agency Group on Education Inequality Indicators to develop robust indicators and more systematic surveys of education equity.

Privatization (proportions of private and public schools, and proportions of students in them) is the only marketization aspect that is consistently highlighted in statistics from the Nordic countries. A question on competition was included for some time in the PISA questionnaire for principals, but other sources provide no information on this issue. With some exceptions, the *accessibility* of data is generally good, but *transparency* in terms of language and clarity of definitions could pose problems. *Comparability:* Differences in the Nordic educational systems (e.g. in the organization of special needs education, structure of upper secondary education and grading systems) pose major problems for comparisons. In addition, varying definitions of key concepts in statistics may hinder comparisons.

Currently the educational (and other) statistics collected by the large international actors (the OECD, EC and UNESCO) provide the most extensive possibilities for comparisons of relevant variables in the Nordic countries. However, such statistics commonly provide cruder and less transparent descriptions than the dedicated national statistical databases. Thus, the paucity of systematic Nordic collaboration in the selection and harmonization of national

educational statistics (and consequent sparsity of common Nordic statistics) is problematic. We therefore advocate further harmonization of the presentation of Nordic national register data on education. We also recommend establishment of a similar project in the educational field to the NOMESCO and NOSOSCO initiatives in medicine-social welfare (Normann, Rønning, & Nørgaard, 2013). Such a project should include close collaboration with researchers and target both register and survey data.

Notes

1. The paper emanates from our research in the Nordic Research Centre 'Justice through education in the Nordic countries' (JustEd), funded by NordForsk.
2. Also cf. Albæk et al. (2015), who note the scarcity of Nordic statistical data enabling comparisons of school-to-work transitions.
3. The United Nations Educational, Scientific and Cultural Organization.
4. Organisation for Economic Co-operation and Development.
5. The European Commission.
6. The International Association for the Evaluation of Educational Achievement.
7. The Commission on Equality and Human Rights in Britain commissioned the report.
8. See Bøyum (2014) for a critical analysis of the OECD's use of the fairness concept.
9. Justice as 'requiring social arrangements that permit all to participate as peers in social life.' (Fraser, 2008, p. 27).
10. <http://www.iea.nl/our-data>.
11. <http://91.208.143.100/pxweb/norden/pxweb/en/Nordic%20Statistics/>.
12. Interviews with the national experts.
13. For example, the handbooks or technical sections of all the major databases and studies stress that the terms mean different things, even when the systems are similar or essentially the same.
14. <http://91.208.143.100/pxweb/norden/pxweb/en/Nordic%20Statistics/>.
15. <https://www.skolverket.se/statistik-och-utvardering/statistik-i-tabeller/grundskola/skolor-och-elever>.
16. <https://gsi.udir.no/app/#!/view/units/collectionset/1/collection/77/unit/1/>.
17. For example: the WHO (HBSC), World Bank, OECD and PISA, PIRLS and TIMSS surveys; OECD health data; the Luxembourg Income Study; OECD Society at a Glance overview of social indicators; IEA Civic Education study; European School Survey Project on Alcohol and Other Drugs (ESPAD); and many others. In addition, the UNICEF Innocenti Center publishes report cards on children's well-being (see www.unicef-irc.org/research/) as do various other international bodies.
18. <http://www.education-inequalities.org/about>.
19. See Zapp (2017) on the World Bank's increased involvement in knowledge production on education.
20. <http://ec.europa.eu/eurostat/web/education-and-training/publications>.
21. The indicators can be accessed at <http://nomi.bazooka.se>.

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Appendix A

Acronyms

EASIE	European Agency for Special Needs and Inclusive Education
EC	The European Commission
ESPAD	European School Survey Project on Alcohol and Other Drugs
GSI	Grunnskolen Informasjonssystem (Information system on compulsory education, Norway)
HBSC	Health Behaviour in School-aged Children
IAG-EII	Inter-Agency Group on Education Inequality Indicators
ICCS	The International Civic and Citizenship Study
IEA	The International Association for the Evaluation of Educational Achievement
KOLADA	Kommun- och landstingsdatabasen (The database of municipalities and regions, Sweden)
KOSTRA	Kommune-Stat-Rapportering (Municipality – state reporting, Norway)
NOMESCO	Nordic Medico-Statistical Committee
NOSOSCO	Nordic Social Statistical Committee
NOVI	Nordic Welfare Indicator System
OECD	Organisation for Economic Co-operation and Development
PIRLS	Progress in International Reading Literacy Study
PISA	Programme for International Student Assessment
SNAE	Swedish National Agency for Education (SNAE)
TIMMS	Trends in International Mathematics and Science Study
UIS	The UNESCO Institute for Statistics
UN	The United Nations
UNESCO	The United Nations Educational, Scientific and Cultural Organization
UNICEF	United Nations Children's Fund
UOE	UNESCO, OECD and Eurostat
WHO	World Health Organization
WIDE	World Inequality Database on Education

Appendix B

Explored databases

National statistics (www.dst.dk, www.stat.fi, www.statice.is, www.ssb.no, www.scb.se)

- **Educational statistics, national level^a** (<https://www.udir.no/tall-og-forskning/statistikk/>, <https://statistikkportalen.udir.no/>, www.skolverket.se/statistik-och-utvardering + <https://www.statice.is/statistics/society>)
- **Educational statistics, municipal level^a**
- Norway: GSI (grunnskolen informasjonssystem), KOSTRA (Kommune-Stat-Rapportering), the largest cities' own databases
- Sweden: SIRIS (Skolverkets Internetbaserade Resultat- och kvalitetsInformationsSystem), SALSA, KOLADA (Kommun- och LandstingsDatabas),
- Iceland: Statistics Iceland <https://www.statice.is/statistics/society/education/compulsory-schools/>

Nordic statistics (<http://91.208.143.100/pxweb/norden/pxweb/en/Nordic%20Statistics/>)

International databases and statistical reports

- OECD database <http://stats.oecd.org/>
- OECD Education at a Glance <http://www.oecd.org/edu/education-at-a-glance-19991487.htm>
- PISA database (OECD) <http://www.oecd.org/pisa/data/>
- UNESCO UIS.Stat <http://data.uis.unesco.org/>
- UNESCO World Inequality Database on Education <http://www.education-inequalities.org/>
- WHO: Health Behavior in School-aged Children (HBSC) <http://www.hbsc.org>
- Eurostat <http://ec.europa.eu/eurostat/data/database>
- European Agency for Special Needs and Inclusive Education <https://www.european-agency.org/>
- The IEA International Civic and Citizenship Study (ICCS) <http://iccs.iea.nl/home.html>

^aIllustrated with data from Norway, Sweden and Iceland.