Chapter 1
Equity, Equality and Diversity in the Nordic Model of Education—Contributions from Large-Scale Studies

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1.1 Introduction

In education, the 'Nordic model' refers to the similarities and shared aims of the education systems developed in the five Nordic countries—Denmark, Finland, Iceland, Sweden and Norway—after World War II. Traditionally, there have always been many similarities and links between the Nordic countries through their historical connections and geographical proximity. The common experience of solidarity and political oppression during World War II also created the basis for a common political orientation in the postwar period, which was also reflected in the education systems during the development of the countries' economies and their establishment of welfare states. At the same time, this process has been strongly supported by social-democratic governance in these countries in the 1960s and 1970s (Blossing, Imsen, & Moos, 2014). The model is based on a concept of *Education for All*, where equity, equal opportunities and inclusion are consistently cited as the goal of schooling and orientation (Blossing et al., 2014; Telhaug, Mediås, & Aasen, 2006). This corresponds to the egalitarian idea of a classless society, which is characterised by individual democratic participation, solidarity and mutual respect and appreciation for all. This idea was manifested in, for example, major reallocations of economic resources through the tax systems and free schooling for all, which arose out of the principle that parents' lack of economic resources should not prevent children from obtaining a good quality education. The equalisation of structural inequalities and creation of equity was—and still is—the task of the education system in the Nordic countries. Worldwide, especially within the Nordic countries, the view is being shared that the education system should be fair and provide access and opportunities for further education, regardless of where someone lives, the status of the parental home, where someone comes from, what ethnic background someone has, what age or gender someone is, what skills one has or whether someone has physical disabilities (Blossing et al., 2014; Quaiser-Pohl, 2013). Some

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special features of the Nordic system are therefore deeply embedded in the school culture in the countries, for example, through the fact that access to free and public local schools and adapted education is statutory, which is in contrast to many other countries, even other European ones (further developed and discussed in Chap. 2). The Nordic model is widely considered a good example of educational systems that provide equal learning opportunities for all students. Achieving equity, here meaning the creation of fairness, is expressed concretely in political measures to distribute resources equally and strengthen the equality of marginalised groups by removing the barriers to seize educational opportunities, for example, when mixed-ability comprehensive schools are created or the educational system is made inclusive regarding students with special needs (UNESCO, 1994; Wiborg, 2009). Equality is roughly connoted with 'sameness in treatment' (Espinoza, 2007), while equity takes further in consideration also the question of how well the requirements of individual needs are met. Thus, the goal of equity is always linked to the concept of justice, provided that an equality of opportunities is created. If, however, one looks at individual educational policy decisions on the creation of educational justice in isolation, one must weigh which concept of equity or equality is present in each case. For example, it is not enough to formally grant equal rights in the education system to disadvantaged groups, but something must also be done actively to ensure that marginalised groups can use and realise this equality. The complexity of the terms becomes even greater when one considers that to achieve equality, measures can be taken that presuppose an unequal distribution of resources or unequal treatment and, therefore, are not fair e.g., when resources are bundled especially for disadvantaged groups and these are given preferential treatment (will be further developed and discussed in Chap. 2). Thus, equality and equity rely on each other and are in a field of tension comprising multiple ideas (Espinoza, 2007).

1.2   Challenges Put to the Nordic Model

Because of migration movement beginning in the late 1970s, economic growth and differentiated welfare distribution, social inequality has increased, especially in the last decade. Therefore, teachers in the Nordic educational systems are faced with increasing student diversity. Beyond gender and the students' physical or mental abilities, this diversity very much includes heterogeneity in students' social, cultural and economic background, hence not automatically warranting support and equal learning opportunities for all. More students today than when the common Nordic model was developed have the difficulty of following lessons in the national language, one that is not their mother tongue or even easily spoken at home.

A much more complex diversity has also emerged involving several factors, such as multi-cultural or transnational affiliation, access to (digital) educational resources and mobility in a globalized world, establishing a more complex group structure than in previous decades. Conversely, in policy, general support for the equalising idea behind the Nordic model is decreasing, with claims that globalisation has

forced the Nordic countries to compete on an international scale and that in the recent neoliberal educational policy, 'the concept of a *School for All* is no longer part of the rhetoric' (Blossing et al., 2014, p. 2). As Lundahl (2016) describes, there have always been differences in how the individual Nordic countries shape their education policies. This is partly because of different traditions, the rural character of the countries and different public management mechanisms. Under today's changing conditions, however, differences can now be identified (such as the opening of the educational sector for private schools in Sweden, hegemonic measures for dealing with cultural diversity in Finland and Iceland or the introduction of soft streaming models and ability grouping in Denmark) that call into question the guidelines of the Nordic model. Nevertheless, education policy measures are usually justified by the strengthening of equity. How can this be understood? With these measures, however, it is somewhat unclear how inequalities within the national systems are dealt with and whether educational policy addresses issues of educational inequality or inequity (Espinoza, 2007). Some even question whether a unified approach in the Nordic countries truly exists anymore (Antikainen, 2006; Lundahl, 2016).

1.3   The Outline of This Volume

Although previous analyses of how the Nordic model is enacted in practice take into account the ideological and economic aspects of the educational policy to reduce inequality and strengthen equity in the school systems, their findings have only been backed up occasionally with empirical evidence. Of course, the question of a common Nordic model and how the different countries achieve these aims can be traced in a historical review of the model's origins and development and an analysis of syllabi, curricula guidelines and policy documents in education from the individual Nordic countries. However, here, international comparative studies with a large number of participating students and/or teachers can make a distinctive contribution allowing entire education systems to be observed and compared.

Large-scale studies make use of standardised measuring instruments that meet high-quality assurance standards. In quantitative analyses, the underlying structures in education systems can be traced from a comparative perspective, and references can be made to the similarities and differences in the individual Nordic countries. Empirical evidence from both national and international large-scale assessment studies on the relationship between socio-economic status (SES), different cultural background, different learning opportunities and student achievement has become increasingly important for policy makers when making decisions about educational means to close the achievement gap between different student groups and reduce educational inequality. Based on 20 years of data from the Trends in International Mathematics and Science Study (TIMSS), a recent volume by Broer, Bai and Fonseca (2019) reports, for example, on the changes in the relationship between SES and student achievement and educational inequality. However, cross-country

comparisons on equity and equality and studies that take into account different stakeholders in the Nordic educational system are scarce (e.g., OECD, 2019; Rühle, 2015; Volante, Klinger, & Bilgili, 2019; Volckmar, 2019).

In this volume, we acknowledge and underline the importance of considering the context of education when investigating equity, equality and diversity. We attempt to provide a better understanding of both the functions and the foundations of the Nordic model in education through our theoretical and methodological discussions and our examinations of studies conducted in the Nordic countries. The book consists partly of chapters discussing conceptual, philosophical and methodological issues and partly of chapters presenting key findings from secondary analyses of data from studies of educational outcomes. In the theoretical and methodological chapters, we give systematic presentations of how the results of various large-scale national and international assessment studies can be used as indicators of equity, equality and diversity. The empirical part of the book provides relevant empirical analyses of the different factors related to equity, equality and diversity by considering the impact of factors operating at different levels. There are contributions both related to the school or class levels of equity and on equity at the student level, here inspecting groups of students systematically.

The data pulled together in this book stem from various large-scale assessment studies and are analysed by authors from different countries across the Nordic area. Thereby, we have aimed for a carefully crafted collection of chapters using international and national large-scale assessment studies, including TIMSS, Programme for International Student Assessment (PISA), Progress in International Reading Literacy Study (PIRLS), Teaching and Learning International Study (TALIS), International Computer and Information Literacy Study (ICILS) and national tests (e.g., Norwegian mathematical literacy mapping test). Usually, only internal comparisons within one of these studies are conducted. In this volume, we attempt to contrast the findings from comparable studies to bring in different perspectives. In the different chapters of the book, the investigations address various subject domains (i.e., mathematics, science, reading), different age cohorts and various grades. However, each investigation addresses the aspects pertinent to the topics of equity, equality and diversity across the education systems in the Nordic countries.

Although the theme of this book is the Nordic model, it could however not be realised that all chapters analyse data from all Nordic countries. In most chapters, it is not the model per se that is examined, but the chapters do consist of studies of how features of the model appear at different times in some of these countries and how equity unfolds in the region. In the same way, it is natural that a book based on a Norwegian research group uses Norway as a case. In some large-scale assessments or cycles, data are also available for only some countries (e.g., PIRLS, ICILS, TALIS). Several of the chapters have also been limited to countries that have common features, either educational or cultural. It is nevertheless the case that all considered countries are Nordic.

The book is grounded in the collaboration of a large group of contributing authors of the LEA (large-scale educational assessment) research group from the Faculty of Educational Sciences at the University of Oslo in Norway. The common strength of

the international comparative studies that are conducted by this group lies in the fact that they all deal with the topics of equity and equality on different levels and assess national profiles as a way to inform policy makers. The idea that the group's research results should be made available to other researchers and cooperation with scientists from other universities in the Nordic region, but also from other European countries, was promoted. The studies were also conducted by researchers situated in both the different theoretic and didactic fields—science, mathematics, reading and digital competency—but also in the assessments themselves: the researchers behind this book are 'insiders' in these large-scale assessments, and this contributes to situated, rich analyses of data from international large-scale assessments. Many of the authors are closely involved in the reporting of large-scale studies within their respective countries as well, which is why the creation of this book is all the more valuable for us. The authors have dared each other to be curious, open and transparent by exploring both the basic concepts and methods in our traditional line of research. For this reason, however, it is not to be expected that a fundamental collective and interdisciplinary reappraisal of the topic of equity and equality can take place in the short time of about 2 years it took to write this book. In this respect, the book does not represent basic research or framework development in the field of equity and equality theory, nor is it able to present the results of research programmes, some of which have been running for several years, such as Broer et al.'s (2019) research. Nevertheless, in structuring the book, we have not only taken empirical aspects into account, but also the overarching philosophical-theoretical considerations and a systematic synopsis. Furthermore, we asked a colleague from qualitative instructional research to take a critical stance to the book. With this structure, the findings of the book will be relevant and interesting for researchers, policy makers and practitioners.

1.4   Content and Structure of the Book

Overall, the book comprises four principal sections. The first section contains two chapters on the theoretical-philosophical and methodological considerations of equity, equality and diversity in the Nordic model of education. Chapter 2 starts with the philosophical contribution of Buchholtz, Stuart and Frønes (2020), who discuss the concepts of equity, equality and diversity and their relevance to the idea of equality in the Nordic model of education. The three concepts are interrelated and set as critical keystones in the international comparative debate on educational justice. With the notion that the discourse of the concepts and educational policies based on them reflect the cultural traditions and orientations of the Nordic countries and that evidence on achieved equity has to be interpreted with caution when looking at the findings from large-scale studies, the chapter concretises the ideas in describing and discussing different educational policies of the Nordic countries and challenges the scientific research on equity, equality and diversity.

The section ends with a chapter by Mittal, Nilsen and Björnsson (2020) that addresses diverse methodological and analytical approaches in connection to equity and equality. In particular, they focus on the comparability of the equity measures used and the manner in which countries' level of equity is viewed regarding the different standards and analytical approaches employed. Taking a methodological stance, the authors contribute to the overall discussion on the impact that diverse approaches may have and the implications these hold for educational research as the discussions on equity and educational policy in the Nordic countries evolve.

The second part of the book presents a collection of studies related to the teacher and the school variables in connection to understanding equity, equality and diversity in the Nordic countries. Björnsson (2020) starts by investigating teachers' attitudes and experiences of teaching in a multicultural setting (Chap. 4). Using the TALIS data, the author focuses on the variations in self-efficacy in multicultural classrooms across the Nordic countries, and whether this variation can be explained by different aspects of teacher background.

Continuing with the TALIS data (Chap. 5), Yang Hansen, Radišić, Liu and Glassow (2020) focus on the diversity in the relationship between different aspects of teacher quality and job satisfaction across the Nordic countries. The authors comparatively examine these mechanisms by taking into account both the system characteristics and ongoing changes in each, discussing how these are enacted in an everyday school environment that serves students of different backgrounds and educational needs.

Rohatgi, Bundsgaard and Hatlevik (2020) continue with a comparative perspective (Chap. 6) focusing on Norwegian and Danish schools, here on the topic of digital inclusion and how collaboration between teachers, their professional development, attitude and ICT use affect students' ICT literacy. Taking data from the ICILS study, the authors examine the variation in computer and information literacy in the two countries, where these policies are warranted at the national level.

Nilsen, Scherer, Gustafsson, Teig and Kaarstein (2020) contribute further with their investigation of teachers' role in enhancing equity with the aid of TIMSS data, focusing primarily on the different aspects of teacher qualifications and how these possibly moderate the relationship between students' outcomes and their social background taking into account teachers' instructional quality.

In Chap. 8, using PISA data, Scherer (2020) critically assesses reported evidence for positive and significant SES–achievement relations and the substantial variation of this relation, both in strength and proposed underlying mechanisms, across educational contexts, such as classrooms, schools and educational systems. Using a Nordic lens, he tests three hypotheses, that is, the *compensation, mediation* and the *moderation hypothesis* on the interplay between students' SES, the disciplinary climate and achievement in science.

Finally, in Chap. 9, Nortvedt, Bratting, Kovpanets, Pettersen and Rohatgi (2020) report on how a national-level assessment initiative can contribute to equity in school by improving the opportunities to learn for students identified as at risk for lagging behind in mathematics. Using student data from implementations of the Norwegian mapping test, in addition to data from teacher interviews, the author

team addresses both what happens to an assessment that is exposed over time and how it serves the purpose of supporting teachers and their ongoing practice. The chapter also addresses what happens to the students identified through the mapping tests.

Section three of the book focuses on the empirical studies related to the student-level variables in the context of equity, equality and diversity, exploring the learning opportunities of different student groups. Bergem, Nilsen, Mittal and Ræder (2020) investigate the importance of teachers' instructional quality for student motivation in the view of their diverse socio-economic backgrounds (Chap. 10). Using TIMSS data for Norway, the authors seek to identify how different dimensions of instructional quality are related to motivation for students with different socio-economic background in both grade 5 and 9.

Exploring diverse student profiles is the focus of Chap. 11, which is authored by Radišić and Pettersen (2020). The authors start by investigating the motivational profiles of resilient and non-resilient student groups in Sweden and Norway by using TIMSS data with a person-centred approach. Furthermore, the authors investigate the characteristics of the classroom and school environment pertinent to the identified profiles and compare the results of the two countries.

Frønes, Rasmusson and Bremholm (2020) contribute to the discussion by investigating equity and diversity in reading comprehension through the lenses of the PISA reading assessment (Chap. 12). This chapter studies the reading performance of diverse student groups in the period from 2000 to 2018, including comparisons between Norway, Sweden and Denmark and reading policy development in the countries. The authors in particular, address the introduction of new text formats as multiple and dynamic, which is made possible through the change of assessment delivery mode.

The importance of the delivery mode in reading tests is the focus of Engdal Jensen (2020) in Chap. 13. The author explores the Norwegian case as she examines to what extent delivery mode influences student's outcomes. The chapter strongly focuses on the gender perspective, raising the question whether the change in delivery mode affects boys' and girls' results on reading comprehension tests in the same way.

With the aid of PIRLS data, in Chap. 14, Støle, Wagner and Schwippert (2020) focus on the learning environment at home and investigate whether the children of parents who read in their spare time and have positive attitudes towards reading activities do better on reading assessments, even if these parents have a low level of education. The analyses compare the five Nordic countries, discussing implications in the context of immediate school surroundings and the compensating effects schools may provide for particularly vulnerable groups of students.

The fourth and final section of the book has two parts. It comprises both a critical overview of the book provided in the commentary by the Finnish educational researcher Fritjof Sahlström and a concluding chapter where the editors of the volume provide a brief summary of the book's findings and respond to the commentary.

In his commentary, Sahlström (2020) has been invited to comment on this book for several reasons. First, we wanted the perspectives on this volume from his

qualitative point of view—because over the course of his research career, he has been inspecting the inner workings of the educational system through in-depth case studies, not data from large-scale assessments. Because the goal of this volume is intentionally and deliberately restricted to large-scale international assessment resources, we wanted an outsider perspective to comment on the findings about the Nordic model and the benefits and limitations of the methods and data used.

In the concluding chapter of the book, 'Equity, Equality and Diversity in the Nordic Countries—Final Thoughts and Looking Ahead', by Frønes, Pettersen, Radišić and Buchholtz (2020), we synthesize the findings and possible implications from the empirical chapters and also comment on the benefits and limitations and indicate areas for future research, showing where our findings can be a point of departure for diverse methodological approaches.

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