Faculty of Educational Sciences
University of Helsinki
Helsinki Studies in Education
185/2024

Global Dynamics and Emerging Spaces

Expert Power, Policy Assemblages, and Evidence-Based Policymaking in Nordic Education Reforms

Saija Volmari

ACADEMIC DISSERTATION
To be presented, with the permission of the Faculty of Educational Sciences of the University of Helsinki, for public examination in Festive Hall, Language Centre (Fabianinkatu 26), University of Helsinki,
on 19 June 2024, at 1 pm.

Helsinki 2024

Pre-examiners
Emeritus Professor Bob Lingard, University of Queensland
Professor Iveta Silova, Arizona State University

Custos
Professor Janne Varjo, University of Helsinki

Supervisors
Professor Janne Varjo, University of Helsinki
Professor Jaakko Kauko, Tampere University
Professor Sirpa Lappalalainen, University of Eastern Finland

Opponent
Associate Professor Jason Beech, University of Melbourne

Cover illustration
Askartelija
Saija Volmari

The Faculty of Educational Sciences uses the Ouriginal system (plagiarism recognition) to examine all doctoral dissertations.

Publisher: University of Helsinki
Series: Helsinki Studies in Education 185/2024

ISBN 978-952-84-0148-3 (pbk.)
ISBN 978-952-84-0149-0 (PDF)
ISSN 1798-8322 (pbk.)
ISSN 2489-2297 (PDF)

PunaMusta
Joensuu 2023

Abstract

This dissertation focuses on the use of evidence and expertise in the recent school reforms in the Nordic countries, and the co-creation of global policy space and national policy contexts through the social interactions and networks of knowledge and experts. The study positions itself at the intersection of several disciplines, including education, sociology, geography, and political sciences. Drawing inspiration from previous research in education policy transfer, globalization studies, spatiotemporal theories, and assemblage thinking, this research sheds light on the interwoven and assemblage nature of the national, Nordic, and international policy contexts.

The data used in this dissertation stems from the extensive research conducted in the Policy Knowledge and Lesson Drawing in Nordic School Reform (POLNET) project. It was produced in 2019–2021. Financed by the Norwegian Research Council and led by the University of Oslo, this collaborative effort engaged researchers from six universities in the Nordic countries and the US. Through the meticulous collection and coding of bibliometric references from key policy documents in recent Nordic school reforms, POLNET presents a robust dataset comprising 5391 references. This dissertation focuses on specific subsets of this data: the Finnish database of bibliometric references (N=677), Nordic references across all five cases of Nordic countries (N=255), ten pivotal policy documents from the Finnish reform, and 18 semi-structured expert interviews conducted in Finland (N=5), Iceland (N=5), and Norway (N=8). A novel approach to data analysis is employed to trace moments when the global dimension surfaces within the national context. It explores instances where, in processes of globalization, global evidence produced especially by the international organizations influences national policy formation or where national actors engage in shaping global policy within the realms of national, regional, and global policy creation spaces.

The dissertation is structured into three original, peer-reviewed publications and a comprehensive ten-chapter summary. The publications build on each other's findings. Yet, each one addresses the question of evidence-based policymaking, the use of expertise and the construction of education policy space from a unique angle. Publication I demonstrates how the global emerges within national contexts, driven by national actors engaging in global policy initiatives and influenced by the prioritization of certain types of evidence, such as numerical data, evaluation metrics, and rankings. Publication II builds upon this understanding by examining the knowledge and hierarchy present in evidence-based policymaking, highlighting the involvement of regional coalitions promoting national policy ideas within global policy frameworks. The results illustrate how the national, regional, and global are not layered, but interconnected assemblages of actors and knowledge. Publication III explores the social interactions and roles of expert panel members appointed at the national level. These findings emphasize that ideas and policies do not simply transfer between distinct policy spaces; rather, education policy operates in a networked and relational manner, through assemblages that tie together national and

international sites of policymaking. Together the three publications offer a coherent and rich picture of the complexity of evidence-based policymaking in education, the complex interconnections across national, regional, and global sites, and the central role of experts as policy translators in the school reforms in the Nordic context.

This work not only advances our understanding of the transnational and networked nature of contemporary education policy but also introduces an innovative spatial and assembled reading of empirical data. This reading enables a nuanced decoding of the emergence of the global within the national and the mechanisms of knowledge politics underlying global education policy adoption. In essence, the dissertation underscores that globalization is not merely an overarching force superseding national autonomy and actors but, rather, a process that transforms national actors into accomplices of global forces through the amalgamation of evidence, expertise, and educational reforms.

Keywords: globalization, policy as assemblage, education reforms, evidence-based policymaking, expertise, the Nordic countries.

Tiivistelmä

Tämä väitöskirja tarkastelee tietoperustaista päätöksentekoa ja asiantuntijavaltaa peruskoulu-uudistuksissa, joita on tehty viime aikoina Pohjoismaissa. Se tutkii globaalin politiikan tilan rakentumista tiedon ja asiantuntijaverkostojen kautta sekä kansallisten, pohjoismaisten ja kansainvälisten rajapintojen hämärtymistä koulutuspoliittisessa päätöksenteossa. Tutkimus sijoittuu useiden tieteenalojen – kasvatustieteen, sosiologian, maantieteen ja valtiotieteiden leikkauspisteisiin. Tutkimuksen taustan luovat vertailevan koulutuspolitiikan tutkimus, globalisaatiotutkimus, tila-ajalliset teoriat sekä sommitelmateoriat ja -metodologia.

Väitöskirja on osa kansainvälistä tutkimushanketta Policy Knowledge and Lesson Drawing in Nordic School Reforms (POLNET), ja sen aineisto on tuotettu vuosien 2019–2021 aikana. POLNET-hanketta rahoitti Norjan tutkimusneuvosto, ja sitä johdettiin Oslon yliopistosta käsin. Hankkeeseen osallistui tutkijoita kuudesta pohjoismaisesta ja yhdysvaltalaisesta yliopistosta. POLNET-hankkeessa analysoitiin Pohjoismaissa toteutettuihin peruskoulu-uudistuksiin liittyviä keskeisiä poliittisia asiakirjoja. Näiden bibliometrisiä viitteitä huolellisesti analysoimalla ja koodaamalla muodostettiin tietokanta, joka käsitti 5391 viittausta. Tässä väitöskirjassa keskitytään analysoimaan osaa tästä tietokannasta. Väitöskirjan bibliometrisen aineiston muodostavat suomalainen bibliometristen viitteiden tietokanta (N=677) ja kaikki viidessä Pohjoismaassa löydetyt pohjoismaiset viitteet (N=255). Väitöskirjassa hyödynnetään myös kymmenen Suomen opetussuunnitelmauudistuksessa (2014) keskeiseksi havaitun politiikkadokumentin sisällönanalyysia ja 18:aa puolistrukturoitua, temaattista asiantuntijahaastattelua Suomesta (N=5), Islannista (N=5) ja Norjasta (N=8).

Väitöskirjassa empiiristä aineistoa luetaan uudenlaisella tavalla. Tila-sommitelmallisella luennalla aineistosta jäljitetään hetkiä, joissa globaali ulottuvuus nousee esiin kansallisessa kontekstissa. Väitöskirjassa etsitään politiikkasommitelman kiinnittymiä, joissa globaali tieto saa evidenssin aseman ja vaikuttaa kansallisen politiikan muotoutumiseen tai joissa kansalliset toimijat osallistuvat globaalin politiikan muotoiluun kansallisessa, pohjoismaisessa tai kansainvälisessä yhteistyössä.

Väitöskirja koostuu kolmesta vertaisarvioidusta tieteellisestä julkaisusta ja kymmenen lukua käsittävästä yhteenveto-osiosta. Jokainen julkaisu käsittelee kysymystä tietoperustaisesta päätöksenteosta, asiantuntijavallasta ja koulutuspoliittisen tilan rakentumisesta omasta ainutlaatuisesta näkökulmastaan. Ensimmäinen artikkeli tarkastelee tietoperustaista päätöksentekoa ja asiantuntijavaltaa Suomen perusopetuksen opetussuunnitelman perusteiden (2014) tavoitteiden ja tuntijaon uudistuksessa. Sen tulokset osoittavat, että globalisaatio ei ole kansallisvaltion ulkopuolinen voima, vaan se rakentuu kansallisen politiikan asiantuntijuus- ja tietohierarkioiden kautta, joissa priorisoidaan erityisesti numeerista tietoa, arviointituloksia ja rankingeja. Toinen artikkeli syventää näitä löydöksiä tarkastelemalla pohjoismaisen yhteistyön ja tiedon

merkitystä koulutuspoliittisessa päätöksenteossa. Tulokset havainnollistavat, että kansallinen, pohjoismainen ja globaali politiikka eivät ole toisistaan erillisiä vaan toisiinsa kietoutuneita toimijoiden ja tiedon sommitelmia. Artikkeli myös osoittaa, että kansalliset toimijat voivat niin halutessaan tehdä kansallista politiikkaa globaaleissa kohtaamispaikoissa hyödyntämällä pohjoismaista yhteistyötä kansallisten arvojen ja uudistusajatusten ajamiseen.

Kolmas artikkeli käsittelee kansallisella tasolla nimitettyjen työryhmien jäsenten sosiaalista vuorovaikutusta ja positioita Norjan ja Suomen koulu-uudistuksissa. Artikkelin tulokset korostavat entisestään, että uudistusideat eivät vain siirry globaalilta tasolta kansalliselle vaan että kansallisilla toimijoilla on tässä keskeinen rooli ja merkittävästi valtaa. Artikkelin tulokset havainnollistavat myös, kuinka koulutuspolitiikkaa tehdään asiantuntijaverkostojen ja sosiaalisten suhteiden kautta. Se toimii kansainvälisiä, pohjoismaisia ja kansallisia politiikan tiloja yhteen kietovien tieto- ja asiantuntijasommitelmien kautta. Yhdessä nämä kolme julkaisua tarjoavat yhtenäisen ja rikkaan kuvan tietoon perustuvan päätöksenteon moniulotteisuudesta koulutuspolitiikassa ja asiantuntijoiden keskeisestä asemasta koulu-uudistuksissa kansallisen, pohjoismaisen ja kansainvälisen politiikan leikkauspisteissä.

Tutkimus edistää ymmärrystä nykypäivän koulutuspolitiikan globaalista ja verkottuneesta luonteesta ja esittelee uuden spatiaalisen ja sommitelmanomaisen tavan lukea empiiristä tietoa. Pohjimmiltaan väitöskirja korostaa, että globalisaatio ei ole pelkästään kansallisen autonomian ja asiantuntijuuden korvaava ja syrjäyttävä voima. Se on sommitelma, johon niin kansalliset toimijat kuin tiedon ja asiantuntijuuden hierarkiat kietoutuvat edistämään uudistustavoitteita, jotka eivät enää paikannu selkeästi yhteen tilaan vaan ovat yhtäaikaisesti kansallisia, alueellisia ja globaaleja.

Avainsanat: globalisaatio, politiikka sommitelmana, koulutusuudistukset, tietoperustainen päätöksenteko, asiantuntemus, Pohjoismaat.

Acknowledgements

Long ago, during one of my many journeys, I had the opportunity to visit an observatory and take a closer look at the stars. The astronomer guiding us first asked me to observe the brightest star in the sky with the naked eye. Then, they showed me how it appeared through a telescope. To my surprise, the brightest star in the night sky of the Southern Hemisphere was not one star but two, perfectly aligned and distanced from each other. ”That is the secret of the universe”, they said. ”We shine brightest when we shine together.”

I would not shine half as bright without everyone who supported, encouraged, and collaborated with me during this journey, generously sharing their wisdom and knowledge. I am profoundly grateful to the constellation of remarkable individuals and brilliant minds who have contributed to this endeavour. I extend my deepest gratitude to the following people:

My supervisors, Janne Varjo, Jaakko Kauko and Sirpa Lappalainen. Janne, thank you for always finding the time to provide feedback on my work, even on short notice, and for being a model of calm amidst the chaos of academia. A special thank you for guiding me through the final stages toward defence day, making everything seem manageable.

Jaakko, thank you for walking this journey with me from the early years of a completely different dissertation topic to the conclusion of this new one. Your invitation to join POLNET, your trust in giving me first authorships, and your readiness to help whenever I faced adversity, have been invaluable.

Sirpa, thank you for recognizing the value of this work from the very beginning and for your unwavering support when I doubted my ability to finish this project. Your reminders that this would be a fine piece of work, and your sensitive and kind suggestions for improvement, have kept me going.

My thesis committee, Gunilla Holm and Nelli Piattoeva. Thank you for all the support throughout this journey and for your understanding and compassion when personal challenges affected my progress.

A special thank you to Gunilla for giving me the space and resources at the *Nordic Center of Excellence Justice Through Education* (JustEd) to conduct this research, and for being honest about the realities of academia when discussing my future.

And to Nelli, your inspiration and example as a successful female researcher in the male-dominated field of globalization studies in education have been priceless. Your suggestions for new readings always helped me find the missing pieces.

The pre-examiners of this dissertation, Bob Lingard and Iveta Silova. The most nerve-wracking moment of this journey was submitting my work for examination by two scholars whose work I have read and admired for years. Your feedback not only significantly improved this work but also boosted my self-confidence, helping me realize that my work has a place in academia and that I have valuable contributions to make. I will never forget your kind and encouraging feedback. Thank you for highlighting the strengths of this work when I could only see its shortcomings.

My opponent, Jason Beech. It is an incredible honour to discuss my work with a scholar whose research has deeply inspired me to delve into the globalization of education and challenged me to reassess my own outdated ideas of space and place. Thank you for adjusting your travel plans to come to Helsinki during the enchanting onset of midsummer, perhaps the most magical time of the year in the Nordic countries.

This study was possible because of the *Policy Knowledge and Lesson Drawing in Nordic School Reform in and Era of International Comparison* (POLNET) research project. I am eternally grateful to all members of POLNET for pushing me to strive and evolve as an academic. Over the years we worked together, your help and support were irreplaceable. Beyond academic discussions, our social gatherings sparked intriguing conversations, and after long days, your laughter was the perfect remedy. Thank you from the depths of my heart, Kirsten Sivesind, Berit Karseth, Gita Steiner-Khamsi, Bernadette Hörmann, Andreas Nordin, Ninni Wahlström, Oren Pizmony-Levy, Chanwoong Baek, Christian Ydesen, Trine Juul Reder, Jaakko Kauko, Íris Alves dos Santos, Juho Anturaniemi, Petteri Hansen, Gunnlaugur Magnússon, Berglind Rós Magnúsdóttir, Jón Torfi Jónasson, Dijana Tiplic, Oscar Minge and Lars Johnsen.

Within the POLNET, I am especially thankful to my coauthors Juho Anturaniemi, Jaakko Kauko, Íris Alves dos Santos, Kirsten Sivesind, and Jón Torfi Jónasson. Kirsten and Jon Torfí, being given the opportunity to write the second publication of this dissertation with you was a tremendous boost to my academic self-esteem. Despite your extensive knowledge and years of experience, you always treated me as an equal, never forgetting to offer compliments and praise when warranted. Special thanks to Elina Kuparinen for her extensive work in identifying and coding the bibliometric references in the Finnish documents together with Juho Anturaniemi, and to Chanwoong Baek for providing me with the figures and tables used in the publications of this dissertation, and patiently explaining them to me when I did not immediately understand everything.

In addition to POLNET, I have met many inspiring and profound thinkers through the research groups KUPOLI, EDUKNOW and KUFE, and the members of JustEd. My heartfelt thank yous go to Anna-Maija Niemi, Tuuli Kurki, Elina Ikävalko, Ulpukka Isopahkala-Bouret, Hannele Pitkänen, Ida Hummelstedt, Ina Juva, Tuuli From, Aarno Kauppila, Alina Inkinen, Jenni Helakorpi, Sara Juvonen, Antti Paakkari, Samira Harjula, Linda Maria Laaksonen, Oshie Nishimura-Sahi, Eeva Rontu, Virpi Pakkanen, Heidi Huilla, Helena Hinke Dobrochinski Candido, Touko Vaahtera, Tommi Wallenius, Riikka Hohti, Sonja Kosunen, Mira Kalalahti, Tuija Veintie, Ameera Masoud, Kristiina Hannukainen, Satu Koivuhovi, Joni Forsell, Maiju Paananen, Penni Pietilä, Verneri Valasmo, Heikki Kinnari, Alessandra Aldrovandi and many others. You have been my companions throughout the ups and downs of this journey, through all the agony and fun of academia, including many celebrations, after works, and trips to international and domestic conferences. The one thing I did not anticipate when embarking the PhD journey was to finally find a tribe I feel I belong to and that allows me to find the work I do to not only have a real purpose but bring me so much joy! Many of you have become my closest friends, with whom I can share everything. This bond goes beyond our shared experience of navigating a professional field that often prioritizes competition over co-creation.

I am especially grateful to Elina Lahelma and Hannu Simola, who created the research groups KUFE and KUPOLI. This work is a blend of the legacy and research tradition of both groups. My research has greatly benefited from the foundation they established, and I am honoured to contribute to their ongoing legacy.

My heartfelt thanks also go to my amazing group of friends who keep me grounded in life outside academia. You never shy away from engaging in interesting conversations, even when we sometimes disagree. Your wise words and thoughts have often inspired my research and allowed me to see my work from new perspectives. You constantly remind me of the many options beyond scholarly work and the rich life beyond academic career. No matter where you are on this Earth, you will always hold a special place in my heart.

Finally, my family. First of all, a special thank you to my Dutch family for hosting Michiel and our daughters, when I needed to create a quiet space to think and write. I hope to see you more often now that this work has finally come to end!

As to my childhood family, I am lucky to belong to two families filled with adventurous, smart, and expressive individuals who are never afraid to try new things. The love and support from my parents, siblings, grandparents, aunts, uncle, and cousins protected me from the potential harm of the schooling system, especially as a neurodivergent child. From a young age, our lively dinner table discussions helped me learn to express my opinions and defend my ideas. Growing

up, I understood that living together does not mean always agreeing—a lesson that has been crucial in my academic journey. Thank you for giving me such a strong foundation and always being there when I needed you most.

Throughout this journey, I have also built a family of my own. Michiel, we have weathered more storms than sunny days in recent years. You have been the one to witness firsthand the challenging and heart-wrenching conditions I faced while completing this dissertation. Without your unwavering commitment to our family and your relentless perseverance, I might have given up long ago. This work owes its existence to you, and I dedicate it wholeheartedly to you and our daughters, Salma-Liv and Eline.

In Helsinki, 19 May, 2024

Saija Volmari

List of abbreviations

ANT	Actor-network theory
EBPM	Evidence-based policymaking
EU	European Union
GDPR	General Data Protection Regulation
NCC	National Core Curriculum
NESH	National Committee for the Research Ethics in the Social Sciences and the Humanities, Norway
NPM	New Public Management
NRC	Norwegian Research Council
NSD	Norwegian Centre for Research Data
OECD	Organisation for Economic Co-operation and Development
PISA	Programme for International Student Assessment
POLNET	Policy Knowledge and Lesson Drawing in Nordic School Reform in an Era of International Comparison (research project)
TALIS	Teaching and learning international survey
TENK	Finnish National Board on Research Integrity
UICE	University of Iceland
UNESCO	Organisation for Economic Co-operation and Development
UiO	University of Oslo

Table of content

1 Introduction: The journey begins 1

2 Context of the research and in comparative education studies 5

2.1 The Nordic welfare state and education model as a research context 5
2.2 Three examples of recent Nordic school reforms and the interconnected view on comparison 8
2.3 Criss-cross comparison and the Context as concern 13

3 Research task, questions, and objectives 15

4 Key concepts and onto-epistemological starting points 16

4.1 Policy assemblages, evidence-based policymaking, expert networks, and relational space 16
4.2 Knowing, being, and emerging 20

5 Theoretical journey 22

5.1 Evidence-based policymaking and expert power in a globally interconnected world 22
5.2 Evidence, expertise, and the changing role of the state in education policymaking and politics 27
5.3 Space/time, forerunners of progress, and globalization 33
5.4 Policy assemblage thinking and the education policy studies in ear of globalization 39

6 Research assemblage and the methodological journey 43

6.1 Research process and the methodological journey 43
6.2 Selection of reform cases and the policy documents 45
6.3 Bibliometric and network analysis of in-text references 48
6.4 Expert interviews 51
6.5 Reading findings through spatiality and assemblages 56
6.6 Ethical considerations, research integrity, and GDPR 58

7 Results of the three substudies 60

7.1 Knowledge and expertise valued in the National Core Curriculum Reform, 2014 60
7.2 The regional Nordic cooperation and knowledge in the school reform processes in Finland, Iceland, and Norway 63

7.3 Position of national experts and the role of social encounters and international meeting places in the policy translation process 65

8 Discussion 68

8.1 The global emerging through the national and the hierarchy of knowledge in evidence-based policymaking 68
8.2 Tracing sites and situations: Social encounters, translator positions and the entangled national/Nordic/global policy policy space 70
8.3 Evidence, expert power, and the policy reforms as an assemblage 72

9 Reflections on validity and the research journey 77

9.1 Validity: shortcomings and solutions 77
9.2 The emergent researcher in a research assemblage 81
9.3 Future pathways for research 83

10 Conclusions and final remarks 84

References 87

Appendices 101

Appendix 1. Documents analysed in the Finnish National Core Curriculum Reform in 2014 102
Appendix 2. Documents analysed in the Norwegian Knowledge Promotion Reform in 2016/2020 103
Appendix 3. Documents analysed in the Icelandic policy formation process at various times from 2013 to 2017 104
Appendix 4. The Use of the OECD References in the Finnish Reform 105
Appendix 5. Informed Consent Form 106
Appendix 6. Interview guide 111

List of original publications

This thesis is based on the following publications:

I Volmari, S., Kauko, J., Anturaniemi, J. & Santos, I., (2022). Evidence and Expert Power in Finnish Education Policy Making: The National Core Curriculum Reform. In: B. Karseth, K. Sivesind, & G. Steiner-Khamsi (Eds.), Evidence and Expertise in Nordic Education Policy: A Comparative Network Analysis. (pp. 115–148). Palgrave Macmillan.

II Volmari, S., Sivesind, K. & Jónasson, J. T., (2022). Regional Policy Spaces, Knowledge Networks, and the "Nordic Other". In: B. Karseth, K. Sivesind, & G. Steiner-Khamsi (Eds.), Evidence and Expertise in Nordic Education Policy: A Comparative Network Analysis. (pp. 349–382). Palgrave Macmillan.

III Volmari, S. (2022). Constellation of trajectories and fast policy worlds: A spatiotemporal reading of experts' positions and social encounters in Finland's and Norway's recent curriculum reforms. In: Nordic Studies in Educational Policy, 8(3), pp. 184–195.

1 Introduction: The journey begins

In recent decades, the world has undergone rapid change in the scope, speed, and intensity of cross-border movement of people, goods, and ideas. This development is often labelled as globalization and described as increasing global interconnectedness. In education, globalization is apparent in various ways. One notable aspect of globalization in education is the worldwide alignment of reform ideas and the widespread adoption of similar education policies, entangled with the growing influence of international organizations shaping national policy reforms (Morgan and Volante, 2016; Mundy et al., 2016; Rizvi and Lingard, 2010; Sahlberg, 2016; Verger, 2014; Verger et al., 2012). These developments are intricately linked to the central role of knowledge, which has transcended its traditional role of merely informing policy to shape the very essence of policy (Grek, 2013). The current emphasis on evidence-based policymaking (Wollscheid et al., 2019) further strengthens the pivotal role of knowledge in policy processes. Global standardization of educational reforms has profound implications, not only as it alters the landscape of statecraft in terms of scale and scope but also because it exerts a significant impact on national educational systems and how we view a child, a teacher, a school and an education over time (Popkewitz, 2000).

Globalization in education has led to intense theoretical and methodological discussions among researchers of education policy and comparative education. The debates circle around who oversees the education reforms today, what the roles of state and international organizations in education reforms are, and how to best research the complexities of national education policymaking in a globalized world. Methodological nationalism (Anthias, 2009; Robertson and Dale, 2008; Wimmer and Glick Schiller, 2002), the assumption that the nation-state is the logical and natural starting point for societal and political analysis "representing a unified spatiotemporality" (Sassen, 2002, p. 260) has been thoroughly contested. Only recently, more attention has been paid to methodological globalism, (Lingard, 2021; Takayama and Lingard, 2021; Clarke, 2019), which is akin to what Bayly and fellow researchers (2006) call "the grand narrative of globalization," a view on globalization as a force that is pervasive and independent from the local conditions and actors.

New spatial methods have been called for to understand the complex interaction of national actors and contexts, and international actors and influences (see for

instance: Gulson et al. 2017; Rizvi and Lingard 2010; Beech and Artopoulos 2016; Larsen and Beech 2014). Furthermore, comparative education researchers like Sobe and Kowalczyk (2018, 2014) and Piattoeva, Klutas and Suominen (2018), have raised the need for more reflective approaches that consider the co-constructive nature of education research, particularly in matters of research context. Previous education research has also been criticized for applying a static definition of space, in which policy ideas are viewed as produced at the global level and transferred to the national sphere (Larsen and Beech, 2014); focusing mainly on the content of discourses in circulation instead of the mechanisms of policy transfer (Exley et al., 2011) and policy adoption phase (Verger, 2014); and a narrow national view that fails to capture the complexity of policy processes and strengthens a dichotomous either/or perspective instead (Simola et al., 2017). In addition, Baek and others (2018) have claimed that education policy researchers tend to be drawn to larger, dramatic changes and reforms, although there is much to be learnt from incremental changes. To add to the list, most research on globalization and education tends to focus on the nexus of the national and the international, but apart from the influence of the European Union (EU) and European Commission, less attention has been paid to the role of regional cooperation in policy diffusion.

This dissertation examines evidence-based policymaking (EBPM) in Nordic school reforms, the globalization of education as assemblages of knowledge and experts, and the entangled policy spaces of the national, the regional and the global. It employs a relational notion of space (Larsen and Beech, 2014) and the concept of globalization as emergent within the national (Sassen, 2013). Theoretically, this study draws from several disciplines, including education policy and comparative education, public policy and administration, sociology, geography, and philosophy. Methodologically, it experiments with a spatial and assembled reading of globalization of education reforms and policy space. The study examines the moments of denationalization (Sassen, 2007) in the policy adoption phase and how globalization is done in education through assemblages of evidence, expertise, and school reforms within what Massey (2005) called "space/time."

The dissertation consists of three peer-reviewed publications (two book chapters and one journal article) and a ten-chapter summary that ties findings together through spatial theories and policy assemblage thinking. Each of the three publications reports the results of one of the three substudies and focuses on one component of national school reforms and global policy space as an assemblage. The starting point of this research is Finland's National Core Curriculum (NCC) reform of 2014. Publication I, *Evidence and Expert Power in Finnish Education Policy Making: The National Core Curriculum Reform* examines the exact events of the global intervening with the national and emerging through national experts 'doing' global policy. Publication II, *Regional Policy Spaces, Knowledge Networks, and the "Nordic Other"* zooms out to the regional level to investigate the role of

Nordic knowledge and cooperation in policy diffusion, with examples in the latest school reforms in Finland, Iceland and Norway. Publication III, *Constellation of Trajectories and fast policy worlds: A Spatiotemporal Reading of Experts' Positions and Social Encounters in Finland's and Norway's Recent Curriculum Reforms*, delves into the positions assumed by nationally appointed experts as policy translators between national and global policy spaces.

The data used in this study was produced in 2019–2020 as part of the international research project Policy Knowledge and Lesson Drawing in Nordic School Reform (POLNET), led by the University of Oslo and funded by the Norwegian Research Council (NRC 283467) from 2019 to 2024. The dissertation combines traditional methods of policy research, expert interviews, and qualitative content analysis, with the more recent methods of bibliometric and social network analysis. As such, this is a mixed-methods study that combines both quantitative and qualitative methods.

According to the traditional structure of a research report, I begin the dissertation by stating the research task, questions, and objectives. Next, I briefly present the context of my research and key concepts. I then proceed to explain the theoretical framework of the research and elaborate on the methodological choices made. This includes the methods of data production and analysis and the spatial and assemblage reading of findings in the three substudies. Finally, I present the main results of the substudies, discuss the overall findings of this dissertation, and present my conclusions.

Despite adhering to the conventions of academic text production, I believe a dissertation is never just about scholarly work. Thomson and Kamler (2010, p. 151) have pointed out that writing a dissertation is both text and identity work, a "doubled activity – writing the research and writing the researcher." It is about positioning the research, and the researcher, in the ongoing discussions in a specific field and demonstrating the relevance of the research results. At the same time, it is about writing the scholar in oneself into being. This dissertation presents my findings and claims the contribution they offer to my chosen academic field. But it is also meant to walk the reader – and myself – through the journey of self-exploration and becoming expert, while reflecting on the co-creationary process of reaching research findings, interpretations, and conclusions.

Calling this research project a journey has a deeper meaning for me than mere metaphor. This journey started years ago when I took my first classes in the sociology of education as an early childhood education student at the University of Jyväskylä. During the years that followed, I studied political sciences as an exchange student in Ireland, then sociology and politics of education in an international master's programme in the Netherlands, interviewed school heads in Poland and Hungary for my master's thesis, worked as a volunteer developing school-based curricula for a vocational school in an indigenous community in Peru,

and finally returned "home" to coordinate a master's programme in sociology and politics of education at the University of Helsinki. It took me a good ten years in university administration and programme planning before I embarked on a PhD journey. I never thought I could begin such a project, and at times believed I was not capable of completing it. But as an ancient Irish blessing says, the road rose to meet me, in the form of new ideas, theories, and kind and inspiring people. Many of them I met in and through POLNET, which has team members from universities in five Nordic countries and the United States. This research is a product of my constellation of trajectories and social relations. Hence, it is not just *using* assemblage thinking or methodology. It *is* in an assemblage, and the reader is invited to join its constant emergence and make it their own.

2 Context of the research and in comparative education studies

2.1 The Nordic welfare state and education model as a research context

This dissertation focuses on the Nordic region of Europe, which comprises a cluster of five states known as the Nordic countries: Denmark, Finland, Iceland, Norway, and Sweden. The Nordic countries share a deeply intertwined history; in the past, many of them were governed under the same head of state (Berntzen, 2017; Laine, 2020). The scope of this dissertation entails three countries – Finland, Iceland, and Norway – which have relatively short histories as independent nation-states. For nearly five centuries, Finland was a part of Sweden, later becoming an autonomous entity within Russia for a century before achieving full sovereignty in 1917. Iceland, too, was under the rule of the Norwegian–Danish crown for several centuries and eventually secured complete independence from Denmark in 1944. Norway, subject to the rule of the Danish monarch for numerous centuries, subsequently entered a union with Sweden, ultimately gaining complete independence in 1905.

Moreover, the Nordic countries share linguistic ties; the Scandinavian languages are North Germanic. A noteworthy exception to this linguistic association is the Finnish language. However, Finland has two principal official languages: Finnish and Swedish. It is customary to release important policy documents in Finland in both languages. In terms of EBPM and policy exchange, the linguistic affinity between these states facilitates relatively easy comprehension of reform proposals and other policy-related materials from one Nordic country to another.

Presently, the Nordic countries continue to be perceived both internally and externally as a unified cultural and political entity. These countries have established substantial cultural, political, and scholarly collaborations. Noteworthy examples include the Nordic Council for inter-parliamentary cooperation and the Nordic Council of Ministers for inter-governmental coordination. The foundation of such "inter-nation state cooperation" (Tröhler, 2023, p. 5) in the realm of educational policy and reform dates back to the late 19th century, in the form of transnational school meetings (Landahl, 2015). Tröhler (2023) astutely highlights that this form of cooperation is rather exceptional and finds it less prevalent in other parts of

Europe or the English-speaking countries. In addition to policy cooperation, academic cooperation in the field of educational sciences and education policy studies is ample too. It can, for example, be witnessed in the broad range of academic journals with a Nordic or Scandinavian emphasis (Tröhler 2023; Jónasson and Bjarnadóttir, 2023).

Today, the Nordic countries are renowned for their distinctive welfare state model, characterized by universal principles and a heightened level of societal trust. This social framework rests upon a mutual understanding, where the collective – channelled through state apparatus, local administrations, or regional bodies – ensures the provision of fundamental services in a universally equitable manner. This commitment entails the conscientious fulfilment of human needs on a collective scale. Within the contours of the Nordic welfare state model, the nation-state has assumed a central role as the overseer of the public domain and the primary supplier of welfare provision. (Esping-Andersen, 1990; Delhey and Newton, 2005; Dølvik et al., 2015; Jacobsson et al., 2004.) This central function of the state and the public sector enjoys broad-based support from both citizens and policymakers. It is widely perceived across the Nordic countries as the most effective approach to safeguarding the common good and upholding social entitlements for all citizens (Anttonen and Meager, 2013). Mechanisms such as expert consultations and public inquiries have been systematically developed within these states to ensure that public interests are taken into account in a policymaking system that places significant emphasis on the authoritative role of the state (Christensen and Holst, 2017; Holli and Turkka, 2021; Publication II).

The Nordic political framework is often described as corporatist or neo-corporatist (Christensen and Hesstvedt, 2019; Christiansen, 2010; Holli and Turkka, 2021), underscored by a pronounced orientation towards consensus (Baek, 2023). As outlined by Christensen and Holst (2017), a significant manifestation of the Nordic corporatist structure is the prevalence of numerous ad hoc commissions. In the Nordic tradition, substantial political reforms are frequently incubated within these ad hoc commissions and working groups, comprising a blend of civil servants, representatives from stakeholder groups, and academic experts (Holli and Turkka, 2021). However, the composition of these drafting bodies has not been uniformly consistent across the Nordic countries. Notably, this divergence is evident in Finland and Norway, which are examined as cases in this dissertation. In Finland, during the 2010s, the number academics within government-appointed working groups halved compared to the preceding decade – and academics now rarely assume leadership positions within such groups (Holli and Turkka, 2021). Norway has witnessed an opposing trend: the involvement of academics has progressively risen over time, alongside a notable increase in the number of ad hoc commissions (Krick et al., 2019). Concurrently, the engagement of stakeholders in these ad hoc commissions has experienced a marginal decline in Norway (Krick et

al., 2019). Baek (2023, p. 196) posits that ad hoc commissions and working groups serve as instruments to "mediate organized interests while seeking technocratic knowledge to solve problems": simultaneously, they function as sources of legitimacy and credibility for policy concepts and proposals.

The practical embodiment of universalism within the Nordic countries has translated into a robust commitment to equality and socially inclusive public policies. This dedication to universalism has extended into the realm of education policy and politics and led to what is often referred to as the Nordic education model (Telhaug et al., 2006). Across all Nordic countries, comprehensive basic education is mandatory, free of charge, and spans 9 to 10 years. Lie, Linnankylä, and Roe (2003. p. 8) illuminate the essence of the Nordic approach to education, stating:

> The Nordic strategy for cultivating excellence and equity in education has been founded on the creation of publicly funded comprehensive schooling systems, devoid of student selection, tracking, or streaming throughout their foundational education until the age of 16. An integral facet of this strategy involves the proliferation of a network of schools, ensuring proximity to students' residences wherever possible, or in cases such as remote areas, furnishing complimentary transportation to schools more widely distributed. Incorporation of specialized education and instructional interventions to mitigate underachievement also typify the Nordic educational landscape.

High-quality, cost-free education is regarded as a fundamental instrument in advancing social justice, a belief that has historically fuelled substantial investments in education across these countries. The cornerstone of comprehensive basic education in the Nordic context has been to bestow equitable opportunities on every member of society, irrespective of factors such as gender, socioeconomic status, ethnicity, or geographical location (Arnesen and Lundahl, 2006; Antikainen, 2006; Esping-Andersen, 1990; Kalalahti and Varjo, 2020).

By and large, the Nordic education model enjoys wide political and societal support within the Nordic countries. It is worth noting, however, that recent educational reforms in the Nordic region have exhibited a spectrum of shifts towards deregulation, privatization, and marketization, albeit to varying extents (Dovemark et al., 2018). This evolution is evidenced by the reduction in state regulations, outsourcing of public sector functions to private and non-profit entities, and restructuring of public institutions to align more closely with market-driven enterprises. As highlighted by Dovemark and others (2018), these contemporary reforms mark a departure from the historical trajectory of the Nordic education system.

In addition, previous research on education transfer and diffusion has compellingly demonstrated the global dissemination of transnational policy. An example relevant to this dissertation is the curricular frameworks anchored in skills

and competencies, promoted fiercely by the Organisation for Economic Co-operation and Development (OECD) and European Commission (Nordin and Sundberg, 2021; Takayama, 2013). This example underscores that the Nordic countries, too, participate in curriculum policy circulation (see, e.g., Søreide et al., 2021), underscoring that they are not exempt from broader global currents in policy circulation.

Despite increasing transnational flows and connections, the established inter-state cooperation between the Nordic countries still maintains its relevance (see Publication II). The Nordic countries are certainly interconnected both through time and space, and share are enough similarities to expect at least some forms of mutual policy learning. Furthermore, neighbouring countries may reflect similar temporal and geographical patterns of the policy spread as they may be committed to similar policymaking cultures and may have chosen similar political models (Dolowitz, 2018).

Although the apparent similarities of the Nordic countries in this dissertation is one reasons I chose to compare them in this study, at the same time, these countries all have their contextual particularities. Instead of viewing them as one coherent entity, I am aware that what we call Nordic is a compilation of several specific contexts in education policymaking and politics. Even if the Nordic countries and their cooperation are called the 'regional policy space' in this dissertation, I do not view the Nordic policy space as a closed and static context. Instead, I perceive this space as connected and intertwined with both national and international policy spaces, and as constantly constructed through interactions and social connections. The theoretical foundations of this view are explained in Chapter 5.

2.2 Three examples of recent Nordic school reforms and the interconnected view on comparison

The selection of case countries was like much of this dissertation journey, an organic process of exploration, and not a premeditated choice. In the POLNET project, each national research team determined the most recent reform in their respective countries and identified the key policy documents behind the reform. I was part of the Finnish team and initially set out to explore the specific national case of the NCC reform in 2014, to find out what kind of evidence was used in it and whose expertise was valued.

During the first substudy, two interesting lines for further investigation emerged. The first one was the absence of Nordic evidence in the policy documents, a finding that was common to all country cases. I and the other authors of Publication II were curious to explore this further. Hence, we decided to use Finland, Iceland, and Norway for a comparative substudy on the role of Nordic policy cooperation and the relevance of Nordic knowledge in their recent reforms.

This became the second substudy of this dissertation. The second line of investigation I felt almost compelled to follow, was the global networks of national experts and their role and power as translators of policy knowledge between global policy arenas and the national context. There were hints of this in the first substudy, but it was during the interviews these themes truly emerged. In the third substudy, I deepened these questions by examining interviews with members of three expert panels in Finland and Norway.

In this dissertation I first zoom into the specificities of EBPM in Finnish reform. Then, I turn to the regional, Nordic policy space, touching upon the global policy space and global evidence hierarchy. Thirdly, I zoom out to the international places of cooperation through the accounts of the national actors and finally circle back to the national by examining the national experts as bridges between international or global contexts and discourses and the national context and discourses. All along, this research process has been guided by the awareness that none of these contexts are fixed or static. Instead, they are intertwined, entangled, and constantly recreated through social interactions.

The POLNET project was founded to systematically analyse in-text references in white and green papers. Not all Nordic countries use this terminology, but in the Nordic context, documents that are produced by the government to suggest or legitimize policy proposals and are then discussed and reviewed in the parliamentary process, act as white papers (Sivesind and Karseth, 2022). Green papers in the Nordic context are for instance public inquiry reports that are produced to evaluate issues and weigh the pros and cons of various solutions (Sivesind and Karseth, 2022). These starting points for the whole project set a framework for the selection of national cases: they had to be recent reforms, with both a white paper and green papers produced before the reform.

In Finland, comprehensive education curriculum was reformed in the NCC in 2014. The process was two-fold. The Finnish Ministry of Education and Culture was responsible for the general objectives of the NCC and the distribution of lesson hours. They produced a proposal for the government decree on the objectives and distribution of lesson hours, which subsequently was discussed and decided upon in the Finnish Parliament. The decree also delegated the power to decide on the content of the NCC to the National Agency for Education (Valtioneuvoston asetus 422/2012). The NCC itself hence is a normative document and cannot be viewed as a white paper, as it was never discussed and reviewed in the parliamentary process. Our team decided to focus on the policymaking process of the government decree and the government's proposal for it. This was based on the interpretation that a white paper in the Finnish system constitutes a draft for new legislation, and green papers provide background information.

Two subsequent government-appointed working groups worked on the white paper and their work was essential for the final decree that was accepted by the

Parliament. The development of government decree of objectives and distribution of lesson hours was the crucial first step in the whole curriculum reform. It set goals and compulsory framework for the content of the curriculum. The most prominent policy documents in this process were the white paper Future Basic Education (Opetus- ja kulttuuriministeriö, 2012) and the green paper Basic Education 2020: Common National Aims and Distribution of Lesson Hours (Opetus- ja kulttuuriministeriö, 2010). This green paper was originally designed as a white paper, but it was discarded at the last minute due to political disagreements and a change in political power. Nevertheless, the 2012 white paper was mainly based on the green paper preceding it, as demonstrated in Publication I. Both working groups utilized expert hearings and statements and extensively involved different stakeholder groups, particularly in the process to discuss the green paper. For example, the working group received commentary from over 200 municipalities in Finland and utilized a survey of over 60,000 students on their experiences in school and their vision of an ideal school.

In the case of Iceland, the analysis in the second substudy (Publication II) was based on three documents used to govern Icelandic compulsory education, together with the law, regulations, and formal curriculum. The period under review was 2013–2017. Much like in Finland, the concepts of white and green papers have not been traditionally used in Icelandic policymaking. The research team working on the Icelandic reform case made an interpretation that white papers are political by default and therefore influenced by the government and the minister in charge of the policy processes; thus, they classified two of the three documents as white papers and one as a green paper (Magnúsdóttir and Jónasson, 2022). In general, the premises on which policies are based are not as systematic in Iceland as in Finland and especially Norway (Magnúsdóttir and Jónasson, 2022) and Icelandic ministers have much autonomy to decide on policymaking procedures (Kristinsson, 2013). However, the political influence of the administration of the same government varies depending on the continuation of policies over time across various governments. If the background work initiated by one minister leads them to continue the policy set by the previous minister, then the background work sets the agenda and may not even be enquired into by a green paper. This is often the case in Iceland, where recent decades have offered many examples of extensive background work being conducted and used to underpin reform bills and resolutions in the form of extensive discussion and consultation rather than in the form of public inquiry and formal written documents, which we refer to as green papers. Thus, although the working mode of Icelandic policymaking relies, sometimes extensively, on internal and external documentation, this evidence does not necessarily reach the stage of reference lists or another formal acknowledgement. (Magnúsdóttir and Jónasson, 2022.)

The Norwegian case was used in the second and third substudy (Publication II and III). Norwegian policymaking procedure is very different from the Icelandic procedure and quite different from the Finnish policymaking protocol. Norway has expended huge resources on public commissions with a mandate to evaluate and make recommendations to decision-makers regarding how to reform and renew the public sector. The government appoints members to sit on these commissions. The bibliometric analysis in the second substudy was based on eight such reports and two white papers. Two public inquiries (the Bostad and Ludvigsen commissions) and one white paper (Subjects – In-depth learning – Understanding, see Appendix 2) served as the basis for the interviews with policymakers in the second substudy. While the Bostad Commission made enquiries and advised the ministry and parliament on how to revise the education clause formulated within the School Act, the main task of the Ludvigsen Commission was to recommend overall goals, aims, and structures for renewing the national curriculum. A group of officials with academic backgrounds in education and experience from the Directorate of Education assisted the experts during the writing process, and civil servants within the Ministry of Education were the main actors in the process of formulating the white paper. They worked closely with the political leadership to finalize the paper. Throughout the process, various groups of stakeholders were invited to comment. (Hörmann and Sivesind, 2022.) The mandate and goals of the Ludvigsen Commission were similar to those of the two subsequent working groups in Finland. In the third substudy, Publication III, I chose to focus only on the interviews with policymakers involved in the Ludvigsen Commission in Norway.

Altogether, the three cases selected for this study vary in terms of organizational arrangements for political decision-making processes. For instance, the cases used in the third substudy (Publication III) demonstrate that although the mandate of all three expert panels was similar, the composition differed in ways that reflect the predominant policy-advisory systems in Finland and Norway. Both the 2010 working group in Finland and the Ludvigsen Commission in Norway had stakeholder representatives in addition to civil servants. However, the commission in Norway had academic members, but the working groups of Finland did not. This reflects the trend in Finland of drastically reducing the representation of academics in government-appointed working groups in the 2010s (Holli and Turkka, 2021), and the opposite trend in Norway (Krick et al., 2019). In line with the latter trend, the Ludvigsen Commission was headed by a university professor and its members included academics. Two of the members represented other Nordic countries, namely Denmark and Sweden. The second working group in Finland consisted only of civil servants from the Ministry of Education and Culture, and there were no representatives from other countries. Both cases, however, illustrate how nationally appointed working groups can have mandates that are deeply rooted in national policy development, yet global policy ideas and discourses have left their mark on

the final output. Hilt, Riese, and Søreide (2019, p. 385) claim that the report of the Ludvigsen Commission "introduced and advocated ideas related to 21st-century skills in the Norwegian context." Similarly in Finland, Uljens and Rajakaltio (2017) state that the new core curriculum follows the key competencies promoted by the OECD.

Conversely, Iceland has adopted no formal procedures to produce white papers based on inquiry bodies, although the government plans to move in this direction. It is up to each minister to determine how the work is approached, the level of party-political involvement, and the influence of stakeholders or professional groups. Parliament is not involved in the formulation of education laws until a very late stage. To conclude, the three case studies varied in their timing, focus, scope, and organizational arrangements. They also varied in what was valued as expertise, as well as how and when in the reform process this expertise was utilized. (Magnúsdóttir and Jónasson, 2022; Publication II.)

The production of specific key policy documents is part of a larger process of reform. As the national terminology differs and the focus of reforms is slightly different in the three Nordic cases, some choices needed to be made, not least for readability. Hence, I use a broader concept of school reform when speaking about all the reforms under examination in this study, but there were national variations in what the reform exactly entailed, as explained in this chapter. Also, I use the broader concept expert panel when talking about the bodies that prepared the reforms. In Finland, these government-appointed expert panels are called working groups and in Norway, commissions. The school reforms examined in this dissertation were:

- The National Core Curriculum Reform in 2014 in Finland;
- The Curriculum Renewal and Improvement Reform in 2020 in Norway;
- Three documents used to govern compulsory education (and the law, regulations, and formal curriculum) in 2013–2017 in Iceland.

The NCC 2014 was used as an example of school reform in Publication I, and all three examples were used in Publication II. In Publication III, I used as examples three expert panels, two from Finland and one from Norway. The expert panels were:

- Two consecutive government-appointed working groups (2010–2011, and 2012) with the mandate to propose a reform for the Finnish national objectives and distribution of lesson hours for comprehensive, basic education.

- The Ludvigsen Commission with the mandate to evaluate content in Norwegian basic education and the needs for competencies in the future society and workforce (2014–2015).

2.3 Criss-cross comparison and the Context as concern

One of the main objectives of this research was to reach beyond methodological nationalism (Anthias, 2009; Robertson and Dale, 2008; Wimmer and Glick Schiller, 2002) and methodological globalism (Lingard 2021; Takayama and Lingard 2021; Clarke 2019). To embark on such a quest, we need to define both comparison and context. What we perceive as context can be viewed as essential to how we do comparative research and what conclusions we draw from it. Recent theoretical and methodological discussions in comparative education underscore the need to reevaluate, and even reinvent, the concepts utilized in the field, especially in an era of heightened, ever-increasing globalization (Cowen, 2014).

What I have presented above on the Nordic context and country cases complies with the traditional image of how context often needs to be described in education policy studies. Several researchers, both in comparative education and critical policy sociology in education, have problematized this understanding of a research context. Piattoeva and others (2018, p. 202) call this view on context "an analytical device that helps to interpret the object under study" and Morita (2014, p. 215) call it "a set of connections between the object of inquiry and its surroundings." Such understandings of context as an analytical device applied to understand a specific phenomenon takes the researchers out of the equation and creates an illusion that a context can be observed from a seemingly objective birds-eye view (Carney, 2019). Furthermore, these understandings tend to equate context with culture or nation-state, and either implicitly or explicitly assume that the nation-state or state model forms one unified context of culture and history within its borders (Silova et al. 2017; Piattoeva, Klutas et al, 2018). Steiner-Khamsi (2014) has warned against such attributional fallacy of equating context with culture or nation-states within specific borders, as it bypasses the broader applicability of underlying practices and processes, and together with Gorur has advocated for a renewed understanding of context within comparative education research (Steiner-Khamsi and Gorur, 2019) that moves away from such a predefined comprehension of context.

Despite the advances made in comparative education, the static perception of context prevails. Drawing on Bruno Latour's work, Sobe and Kowalczyk (2018) draw attention to this deficit. Latour (2004B) differentiates between matters of fact, an approach which treats objects as self-containable and having clear boundaries, and matters of concern, an approach which accepts the complexity and unexpected of objects. The first approach treats research objects as risk-free, but the second invites us to engage with the emergent and unexpected (Latour, 2004A; Sobe and

Kowalczyk, 2012). Based on these ideas, Sobe and Kowalczyk (2012, 2014, 2018) advocate for a reconceptualization of context and propose a distinction between "small c" contexts and "big C" contexts. With "small c" contexts they mean a collection of components that a given setting is viewed to consist of (Sobe and Kowalczyk, 2018), a context as a matter of fact. A "big C" Context is a matter of concern, about the relationality between objects and contexts within which they become intelligible and conjoined (Sobe and Kowalczyk, 2014, 2012). Sobe and Kowalczyk (2018, p. 198) encourage researchers to shift their focus to how Contexts are made in the process of interweaving actors and objects and govern what to think and to do, instead of attending to context as something "that is already there, waiting to be observed and described via stable categories."

In subchapters 2.1 and 2.2, I described a fixed context of fact as is customary to comparative research in education and in other disciplines. However, the aim of this study was not to compare fixed contexts within the case countries to detect similarities and differences, or to identify best practices to fix educational problems. Instead, I use the concept of criss-crossing comparison, coined by Seddon and others (2018) in the lineage of transnational history. Criss-crossing comparison involves a careful exploration of the fabrication of specific events or artefacts, "through particular formations of knowledge, knowledge building and social learning that make and remake identity, relationships, culture and their effects" (Seddon et al., 2018, p.9), intricately interwoven within their temporal and spatial context and continuum. The potential of this approach, as elucidated by Seddon et al. (2018, p. 9), lies in its capacity to "look both at and behind the landscape of tangible surface patterns and processes of knowing and doing that configure globalising education."

This is exactly my intention. I use the Nordic reform cases to examine how future Contexts for education are made through school reforms, and certain policy solutions made intelligible in the conjoining process of policymakers, knowledge, and places. The focus is not on single nation-states but on the global processes weaving together the national, regional Nordic, and international contexts of policymaking, in making reform ideas appear as intelligible and logical next steps in the time-space continuum of national policymaking.

3 Research task, questions, and objectives

The main task of this dissertation is to examine policy assemblages in Nordic school reform processes and shed light on how global policy space emerges within and through national and Nordic policy spaces. To achieve this, I scrutinize the networks of experts and evidence and evidence-based policymaking in Finland, Iceland, and Norway. The research was executed in three phases, through three substudies and three research questions, with each substudy answering one of the three questions. The three research questions are:

1. What kind of knowledge and expertise was valued in the National Core Curriculum Reform in Finland in 2014? (Publication I)

2. What was the role of Nordic cooperation and the value given to Nordic knowledge in the recent school reforms in Finland, Iceland, and Norway? (Publication II)

3. How did the expert panels of Finnish and Norwegian curriculum reform talk about the role of meeting places and their position in the policy translation process? (Publication III)

The objectives of the research are empirical, theoretical, and methodological. The *empirical objective* of this research is to produce new knowledge on how the globalization of education materializes through EBPM and expert networks in Nordic school reforms. The *theoretical objective* is to put into practice the theoretical discussions on the meaning and co-construction of context; to shed light on the interconnectedness of knowledge, actors, and places; and to examine how a transnational education policy space emerges through the assemblages of national, regional, and global. The *methodological objective* is to contribute to the methodology of policy assemblage by experimenting with a spatial reading that focuses on events of denationalization in policy assemblages and the national actors doing global policy in national, regional, and international spheres of education policymaking.

4 Key concepts and onto-epistemological starting points

4.1 Policy assemblages, evidence-based policymaking, expert networks, and relational space

Many of the key concepts employed in this dissertation are frequently used in policy studies, yet seldom explicitly defined. Most certainly, there is no mutual understanding of what these concepts mean. To define my key concepts, I had to explore my onto-epistemological assumptions, standpoints, and interpretative framework. The concepts explained below acted as signposts to navigate through the messiness of my thinking. They were stepping stones on a path through what to me felt like a theoretical and methodological jungle of globalization studies in education. By embracing specific theoretical concepts, I attained a deeper understanding of the underlying onto-epistemological foundations that shaped my research approach. This journey ultimately led me to adopt an assemblage methodology. This methodology is distinguished by its resolute commitment to uncovering multiplicity, revealing processuality, recognizing the labour integral to maintaining and creating assemblages, and acknowledging the inherent uncertainty that characterizes such methodology (Baker and McGuirk, 2017).

Tanesini's (1994) assertion that concepts do not describe anything, fits an assemblage methodology perfectly. To her, concepts "are proposals about how we ought to proceed from here" (Tanesini 1994, 207). This is how I view the concepts presented here as well: as starting points for the theoretical and analytical research process. Furthermore, the concepts themselves complied with the metaphor of journey that I use throughout this dissertation as my understanding of every concept evolved throughout the research process. The first concept introduced here, the concept of policy, is a perfect example of my conceptual journey.

The meaning of policy is often implicitly assumed instead of explicitly explained: as Ball (2017, p. 10) puts it "'Policy' is one of those terms we all use but use differently, and often loosely." I began this dissertation project with exploring the white papers that contained essential proposals for a specific school reform. So, this dissertation started with policy texts, but my research path was guided by the

understanding that policy is more than just a text. I ended up viewing policy as text, as a process, as a co-creation, and finally, as an assemblage.

The concept of policy as text and as a process stems from Taylor, Rizvi, Lingard, and Henry, from Ball and from Considine. Taylor and others (1997) underline that policy is more than just a specific text, or product (here, a reform proposal). It is a process. The process to produce the policy includes ongoing modifications and the implementation of the policy into practice. Similarly, Ball (2017, p. 10) points out that "policy cannot be treated simply as an object but, rather, it is a process, something ongoing, interactional and unstable" that is often viewed as something constructed within the government, but it is in reality "made and remade in many sites" and not fixed by legislation, but "reproduced and reworked over time and through reports, speeches, 'moves,' 'agendas' and so on." Considine (1994) has described the policy world as a process characterized by the constant movement of people and programmes around common problems, education being one example. Policy, according to him, is not a specific decision (or a policy document) because these are "merely important punctuation marks within this flow – not the thing itself" (Considine 1994, p. 4).

It is well established in education policy studies that policymaking is not a purely linear process. For instance, both Taylor and others (1997) and Ball (2017) contest the idea of purely rational policymaking with distinct logical phases following one another. Instead, they stress the political and interactional nature of the whole policy process. This is how I view policy in this dissertation: as a process. I do not include the implementation and enactment of school reforms in the three examples of school reforms, but focus on the text production process. At the same time, I acknowledge that this specific step is part of a larger context of policymaking, including decisions preceding the reforms and decisions that will be influenced by them in the future. Even if I examine one specific moment in the ongoing current of policies, it is not my intention to offer a still or static picture but to use these moments of decision-making as windows onto the complexity of education policymaking and politics by adopting an interactional and social view on these reform processes.

According to Ozga (2019, p. 21), "Politics is an essential element of policy." The selection of information for policymaking is inevitably influenced by politics. Grek (2013) notes a shift from viewing knowledge and policy as distinct to a new paradigm where knowledge and policy merge and knowledge becomes policy, as expertise and undisputed, universal policy solutions form a singular entity. Prince (2010, p. 173) argues that implemented policy is an assemblage of texts, actors, agencies, institutions, and networks, shaped not only by local contexts but also by complex spatially stretched relations that constitute and are driven by globalization.

Thus, another concept of policy guiding the methodological choices of this dissertation is of policy as an assemblage. Instead of treating policy as a coherent

entity, this approach emphasizes the interactions between different policy components, like laws, actors, organizations, and technologies of governance. The specific way components are combined will shape the characteristics and outcomes of each policy or agenda. Altering the arrangement of these components or introducing/removing new elements would result in distinct properties and effects. (Savage, 2020.) Clarke, Bainton, Lendvai and Stubbs (2015, p. 9) have described the process of translation as "when policy moves, it is always translated: that is, it is made to mean something in its new context." An integral part of such a process of translation is "the underlying patterns of interactions" (Lewis and Spratt, 2024, p. 50) that underlines how policy transfer is by no means one-directional flow from one space to another, but rather a multisited assemblage.

Approaching policy as assemblage also challenges the notion that policies are inherently cohesive (Li, 2007) and to my mind, adds to the theoretical discussion on how truth claims in education and reform ideas gain prominence and become self-evident (Ball, 2017). Assemblage theories explore the processes behind such universalization and reject the much-used micro–macro divide in policy studies (DeLanda, 2006). Furthermore, in her research on policy assemblages, Gorur (2011) emphasized "policy doing" over "policy making" to capture and highlight the dynamic and fluid nature of policy processes.

Paul Cairney's description of EBPM illustrates how policy, even when presented as evidence-based, is inherently political. Cairney (2016, p. 216) asserts that even when it is claimed that the policymaking process is guided by objective evidence, decision-making is not purely rational and logical, but always entails competing information, a large number of actors each with their own rules and ideas, and affects and emotions. The exploration of EBPM necessitates a comprehensive understanding of the interwoven concepts of knowledge, information, evidence, and data. While these terms are often employed interchangeably, this dissertation adopts a precise distinction, particularly concerning the concept of evidence. In the context of the POLNET project, Cairney's definition of evidence is pivotal. According to Cairney (2016), evidence encompasses arguments or assertions supported by information. Evidence thus goes beyond general knowledge. It entails linking a particular narrative to knowledge, often shaped by political factors. This narrative that accompanies the information is then utilized to create statements or construct arguments. Within this study, the concept of knowledge assumes a broad connotation, focusing on the power of "knowing" and the dynamics of expertise. Policy discourses wield distinct rationalities, rendering specific sets of ideas as self-evident, common sense, and "true." These discourses mobilize truth claims, actively shaping social reality rather than passively reflecting it (Ball, 2017, p. 8).

Another concept used here is that of expertise. Linked to the concept of power of knowing, in this dissertation I do not view expertise as something construed as an individual trait or skill, but rather as a product of network effects emerging from

social interactions. Drawing inspiration from Gil Eyal's characterization of expertise as "a historically specific way of talking" and "doubly external" (Eyal, 2019, 31), I interpret both knowledge and expertise as contextually defined, relational constructs bound by time and place. Eyal underscores that expertise is not contingent solely upon individual qualifications or skill sets; instead, it is a phenomenon rooted in the relationships and networks interlinking individuals.

I derive the concept of relational space utilized in this dissertation from Doreen Massey. Massey's definition of space as "the social relations stretched out" (Massey 1994, p. 2) is much cited in education policy and comparative education studies. In her later work, Massey elaborated on this social aspect of space by defining space as a "product of our relations with each other, our connections with each other" (Warburton, 2013, p.2). Space is the founding concept of what Massey has called the geography of power that is constructed out of global connections that mirror existing power relations, both local and global (Warburton, 2013). Temporality is an integral part of spatiality in Massey's thinking, so much so that she has coined the concept of space/time (Massey, 2005). However, spatial temporality is not linear and chronological, but "space is the dimension that presents us with the existence of the other; space is the dimension of multiplicity" (Warburton, 2013, p.2).

In her extensive work on space, Massey does not so much coin a specific definition of place, as describe its characteristics. She stresses the relational and dynamic nature of both space and places and claims that the uniqueness of a place is not based only on what exists within its boundaries or borders, but just as much from what is outside those borders, from the specific locations in the multiple networks a place is connected to (Massey, 2007). A place is simultaneously characterized by the "throwntogetherness" of people and things in it, as well as the lines of global power structures that run into, through and out of it (Massey, 2005).

Inspired by my reading of Massey, in this dissertation I view place as compressed space/time and specific nodes within a larger space, both being characterized by interconnections, social relations, and global power geometry. A place described like this, is very much characterized by "compressed policymaking moments" (Peck and Theodore, 2015) in which long-distance relations intensify and create heightened immediacy and a sense of urgency that enables the manifestation of certain policy ideas and enable their transfer and translation into other spaces and places. Drawing inspiration from Massey, I view place as a convergence of compressed time and space, comprising distinct nodes within a broader spatiality. Place is inherently marked by cross-border interconnections, social relationships, and the intricate web of global power dynamics.

All in all, the concepts listed here have enabled me to think about space as relational, assembled and constantly emerging. Indeed, the concepts I present here are themselves certainly not carved in stone. John Law (1999, p. 2) has contested

the need for research to name theories: he claims that the mere act of naming is not necessarily helpful, as it suggests that a theory is pinned down and "a definite intellectual space within an equally definite space." As Simola and colleagues (2017) propose, in this dissertation I embrace a both/and perspective, rather than an either/or dichotomy. I view the relationships between global, regional, and national influences in the formation of education policies as intricate, ever-changing, entangled, and emerging phenomena, intricately woven through social relationships and interactions. In line with my commitment to assemblage thinking, the conceptual toolbox presented here should also be viewed as evolving with the researcher, and in constant movement and flux.

4.2 Knowing, being, and emerging

This dissertation builds on a dynamic and relational understanding of policy space, evidence, and expertise as emerging through social interactions and interconnections. It follows two principles of critical spatial thinking identified by Edward Soja: 1) the principle of spatiality of being, meaning we are all spatial, temporal and social beings; 2) the principle of social production of spatiality, meaning space is socially produced and can be socially changed (Soja, 2009, p. 2).

These principles are applied to take into consideration the entanglement of knowledge and power, and the power structures and geometries that affect these interactions and connections. At the beginning of my research journey, I was predominantly interested in post-structural theorizations of power and governance. However, both the research design of POLNET and the literature on space as constituted in networks and as socially constructed, steered me gradually towards actor-network theory (ANT) and finally, towards assemblage thinking and new materialist onto-epistemology. Fox and Allerd (2017) have described the new material ontology as "flat" and "monist" (as opposed to "dualist") and as rejecting social structures as explanations of how societies work. One example of an explanatory structure which is much used in studies of education policy and politics today is neoliberalism. Conceptualizations of power structures are central to the post-structural thinking I started this study with. I drew inspiration from the plethora of education policy studies utilizing Foucault-inspired theories to scrutinize education governance and shifting power relations within it. I also draw quite extensively from Doreen Massey who has often been perceived as a post-structural geographer and sees global power structures as a factor in policy reform formations. Hence, my ontological starting points cannot be said to be purely new materialistic, as the ontological assumptions guiding this study are inspired by post-structural policy analysis, although my understanding of power mainly stems from assemblage theories as originally presented by Deleuze and Guattari.

The distinction between ontology and epistemology has always been tricky for me. With a view of interconnectedness and co-creation as the essence of human and non-human existence, it is hard to anchor myself epistemologically and ontologically in one specific -ism. Perhaps the closest I get to choosing one -ism is to state that this research stemmed from a view of both existence and knowing as entangled, relational and in a constant state of becoming. My main inspiration for this worldview in the context of academic research comes from Karen Barad. Finding her work felt like coming home to a place I did not know even existed.

Barad (2007, p. 185) has claimed that "we don't obtain knowledge by standing outside the world; we know because we are of the world." This citation elaborates simultaneously on epistemological questions of *what and how we know*, and ontological questions of *who and how we are, exist and become*. Taking Barad's rather revolutionary thinking seriously means the sharp divisions between ontology and epistemology are blurred. Skeggs (1995, p. 23) claims that "to understand this, it is important to see the experience of research as linking the epistemological to the ontological; the process of doing research is not divorced from our social locations: it is how we are produced as gendered, classed or raced."

Embracing assemblage thinking involves acknowledging and embracing the acceptance of our research outcomes as contextualized interpretations and humble assertions grounded in self-reflection (Baker and McGuirk, 2017). This brings with it respect towards other ways of knowing and knowledge production in other disciplines, states Barad (2007). Instead of reading one theory against another, although I do not specifically utilize her agential realism or diffractive methodology, in this study I share Barad's commitment to "place the understandings that are generated from different (inter)disciplinary practices in conversation with one another" (Barad, 2007, pp. 92–93). Barad's work has greatly inspired my worldview and the onto-epistemology guiding this dissertation, which aims to engage in theoretical and methodological discussions across several disciplines to raise questions about how we can understand policy formation in the transnational world.

5 Theoretical journey

5.1 Evidence-based policymaking and expert power in a globally interconnected world

The current decision-making culture in most Western democracies is permeated by the need to claim political decisions are based on evidence. The role of experts providing and selecting the "right" evidence has increased in modern democracies worldwide. Experts, expert panels, and expert organizations hold significant power to shape policies that directly impact the lives of countless individuals. For instance, they guide allocating scarce resources and tackling crises like a global pandemic. In times of adversity and uncertainty, such as the Covid-19 pandemic, experts gain prominence. (Christensen et al., 2022.) Even if experts are consulted more and rise to power more easily in times of immediate crisis, this by no means exceptional, but rather "a powerful reminder and illustration of how policies are normally made" (Christensen et al., 2022, p. 1). This development has been called "the rise of unelected" (Vibert, 2007).

The increasing influence of the unelected in policymaking has been claimed to pose a potential threat to democracy (Moore, 2017). In the current era of post-truth in which alternative truths compete and common sense is glorified (Whitty and Wisby, 2020), public trust in experts is diminishing, leading to concerns about the erosion of their authority (Christensen et al., 2022). Despite this, Christensen and colleagues (2022) claim that experts' power is increasing, asserting that expert advice is crucial for sound political decision-making. The power of unelected experts is directly linked to changing modes of governance, in which political decisions are framed to be objective and evidence-based, and knowledge plays a crucial part in political decision-making.

The increasing role of non-elected experts is not a new phenomenon. In 1997 in the United Kingdom, New Labour taking office marked a renaissance of EBPM. Rooted in the ideology of New Public Management (NPM), in its election campaign the party proclaimed that "what counts is what works" (Blair, 1997). As Sanderson (2006, p. 124) formulates it, this proclamation marked "a renewed optimism about achieving direct and instrumental use of research in policy-making" and became the cornerstone of New Labour's social and economic programme (Wells, 2007). At the same time, the constitutional reforms and the agenda of the Blair Government

were a continuation of the NPM approach to public administration that emerged in the 1980s. NPM represented a profound reshaping of public services that shook established norms within public corporations and the professionalized welfare state as a whole, including education. Its transformative elements encompassed widespread privatization of once state-run corporations. Meanwhile, the remaining public sector functions were subjected to market-driven strategies and managerial approaches. This overhaul aimed to ensure cost-effectiveness through comparative benchmarks, pervasive audit mechanisms, and an increased focus on assessing relative performance. A central feature of NPM was the shift from maintenance management to change management, introducing a political discourse of continuous improvement and organizational learning (Ferlie et al., 1996). This shift furthered "what counts is what works" thinking and what since then has become known as evidence-based or informed policymaking.

Today, the "evidence agenda" (Wollscheid et al., 2019, p. 273), has been adopted as one of the key operational principles in democracies worldwide. Its rise is based on the ideas of transparency and accountability fostered and spread by NPM. The evidence-based paradigm entails the expectations that transparent decisions should be based on objective information, instead of ideological or emotional driving forces, and that those in power are made accountable for their decisions. In this operational environment in Western democracies, the role of experts in providing the evidence has become crucial. Many different forms of knowledge, including the tacit knowledge of practitioners like civil servants with long experience in certain policy areas (Holst and Molander, 2019), have been integrated with the practices of academic knowledge production, and academic experts are competing with other experts as potential advisors for policy (Maasen and Weingart, 2005). As a result, a kind of risk management has become an integral part of expert work. Experts are evoked upon "to manage ambiguity that results from the process of integrating different forms of knowledge" (Stanziola, 2012, p. 290). As knowledge is produced and disseminated at a constantly accelerating speed, choosing the knowledge to be used as evidence is one key task of experts today (Holst and Molander, 2019; Maasen and Weingart, 2005; Moore, 2017; Sanderson, 2006; Stanziola, 2012).

Head (2008) categorizes knowledge in policymaking into three types: political, scientific, and practical implementation knowledge. Political knowledge involves the expertise and judgement of political actors, while scientific knowledge encompasses academic research and systematic information gathering. Practical implementation knowledge, also known as tacit knowledge, is also emphasized by Holst and Molander (2019). Each type offers a distinct perspective on evidence and policymaking (Head, 2008). This suggests that policymaking cannot strictly be based on evidence, which would involve a systematic process from identifying the policy problem to implementing evidence into practice (Sackett, 2000). Instead, it

may align more with the concept "evidence-informed," which follows some EBPM steps but emphasizes cyclical and interdependent implementation (Kumah et al., 2022). Khosrowi (2021) distinguishes between narrow and broad EBPM. Broad EBPM resembles of what is often referred to as evidence-informed policy as it does not specify criteria for valid evidence or its application, nor does it focus on evaluation of specific impacts. In contrast, narrow EBPM prioritizes determining effective policies, often emphasizing different effectiveness studies as evidence. Narrow EBPM is championed by various institutions and promotes the idea that more and better evidence, especially from higher hierarchical levels, improves decision-making (Smith, 2013; Parkhurst, 2017). This approach, particularly in education policymaking and politics, will be discussed in Chapter 5.2.

Several researchers have pointed out that policymaking is a complex process influenced by factual information, societal norms, and existing commitments (Cairney, 2016; Head, 2008; Parkhurst, 2017). No matter what evidence is provided and whether the decision-making process is claimed to be evidence-based or -informed, governments often have made commitments (Head, 2008), in which case "evidence" is used to legitimize these existing commitments. Legitimation is integral to the policy process, which further disputes the rational-logical view of EBPM. Christensen and Hesstvedt (2019, p. 86) claim that politicians may turn to experts for advice for political-strategic reasons: science works well when one needs to legitimize decisions that have already been taken in practice or to "postpone or bury a decision on a topic." The politicized nature of policymaking and the political-strategic reasons behind the use of evidence are in line with the argument Pawson (2006) made that the main aim in policymaking may not be to base policy on the best available knowledge, but to find knowledge that works as evidence in decisions or reform ideas one wants to push and implement. In the context of education policymaking, Baek (2023) points out that expert individuals and bodies assist in solving policy problems and mediate between different interests but are also used to legitimize decisions and provide credibility to policy proposals. Indeed, previous research on policy borrowing and learning has demonstrated that national experts leverage cross-border data to legitimize decisions particularly in the context of contentious reforms (Steiner-Khamsi, 2012A), and apply evidence – such as the PISA results – in variety of ways to fit the national policy discourse (Waldow and Steiner-Khamsi, 2019). In a nutshell, as Rizvi and Lingard (2010, p. 1) have emphasized, experts are also used "to justify and promote political decisions, helping to steer social formations in particular directions."

The evidence agenda is based on the belief that state authorities can put political ideologies and values aside, and objectively, rationally identify effective solutions to specific problems (Wollscheid et al., 2019). In reality, decision-making involves diverse actors, competing information, and emotions (Cairney, 2016). Sivesind and Karseth (2022) underscore that politics and science operate with different

rationales, and the role of empirical evidence varies across specific contexts and political projects. Policymakers may lack the time to learn about scientific knowledge and hence do not prioritize it as evidence (Cairney and Olivier, 2017). The influence of tacit knowledge further complicates tracing the origins of policy ideas (Holst and Molander, 2019; Krick et al., 2019), challenging the notion of a linear and logical policymaking process. The crucial issue of values comes into play when considering the power exercised by experts, as they in their work wield influence on social formations to develop specific directions, as Rizvi and Lingard (2010) state.

Christensen and colleagues (2022, p. 20) point out that "anyone acquainted with the expert reports of real-world policymaking will also have learnt that such reports seldom respect any strict demarcation between facts and values." In terms of facts and values, education policymaking is indeed a distinct area of politics. Unlike for instance with Covid-19 vaccination, in education, we do not really have the benefit of testing out different scenarios or solutions. Even if for instance learning outcomes are nowadays often measured with standardized testing (see Chapter 5.2.), the actual results of education can be witnessed only after a long time. Even then, there is much that escapes the scope and possibilities of standardized measurements of quality in education (Pitkänen, 2019). Hence, it is hard to detect direct causal links between chosen policies and the results they yield. Furthermore, the chosen methods of measurement themselves shape how schooling and the child are seen and what is expected from both (Gorur, 2016; Pitkänen, 2019). Popkewitz (2000, p. 9) has emphasized that education reform proposals do not neutrally describe the desired change, but should be seen "as embodying a deep reshaping of the images of social action and consciousness through which individuals are to relate to the multiple global and local contexts in which they participate." This being the case, education policymaking is, as Rizvi and Lingard (2010) state, value laden.

Values were part of the definition of public policy made by Easton (1953, as cited in Lingard 2021A) in the 1950s, as an "authoritative allocation of values." Lingard (2021A) has offered an updated version of this definition that takes the effects of globalization on the current practices of statecraft into consideration. He suggests reframing Easton's definition to take into consideration this change, and to define policy as "the authoritative allocation of values framed by politics and mediated by logics of the practice of the state" (Lingard 2021A, p. 9). Cairney and Olivier (2017) emphasize the inescapable influence of societal values and political preferences on EBPM. They highlight the paradox of aspiring to EBPM while integrating value judgements. Acknowledging the trade-offs, they note that the production of evidence is inherently value-driven.

Knowledge and expertise are entangled, particularly since experts' tasks range from providing specific knowledge of their field to choosing the knowledge used as evidence and acting as risk managers. Normand (2017, p. 74) has conceptualized

expertise as "a specific activity of knowledge production participating in the process of negotiation and orientation of public policy." In this dissertation, I rely on Eyal's definition of expertise. Contrary to popular beliefs that expertise is a specific set of skills or body of knowledge an individual possesses, Eyal (2019, p. 31) sees expertise as a quality attributed to an expert externally by others, but also "expertise resides in the disciplinary knowledge system composed of abstractions and general rules." An expert needs to have mastered such a knowledge system and be able to apply it to advise within such a system, on problems they are familiar with as well as completely new problems (Eyal, 2019). One essential trait that qualifies one as an expert is the ability to produce advice based on information that is consistent with scientific norms and procedures (Holst and Molander, 2017, p. 238).

Eyal (2019) claims that expertise is constructed in networks and located in the relationships between the experts, not within individuals, and this also applies to experts' tacit knowledge. Expertise and knowledge, seen through these lenses, form an interconnected assemblage, within which, as Gorur (2011) has described the policy process, policies are dynamically "done" instead of statically "made." In such an assemblage, knowledge, expertise, and policy emerge through processes of selection and arrangement of the potential parts (Savage, 2020). This concept of assemblage contests the traditional, idealistic take on policymaking as a rational straightforward process, and as predominantly national. Today, networks of experts and knowledge stretch beyond national borders due to globalization, which has disrupted closed national systems (Theisen et al., 2016).

Over the past three decades, post-bureaucratic governance has replaced hierarchical and state-centred structures, with diverse networks of policymakers, experts, and practitioners co-producing governance (Grek and Ozga, 2010). In this post-bureaucratic era, power disperses, and knowledge is generated across multiple levels and actors, deviating from centralized state control (Grek, 2013). Networks contribute varied lived experiences, offering diverse "evidence" on what works and is meaningful (Head, 2008). Meaningful constructs are negotiated in networks spanning multiple levels, challenging the traditional view of layered policy spheres of the national and the global. This shift is reflected in the evolving role of knowledge; Grek (2013, p. 707) asserts that knowledge no longer merely informs policy but embodies it, marking a significant departure from previous perspectives on the relationship between "knowledge and policy" or "knowledge in policy" to an era of "knowledge is policy." We can observe this transition in the realm of education policy, in the growing influence of international organizations in generating policy knowledge and the changing role of the state, which I move on to next.

5.2 Evidence, expertise, and the changing role of the state in education policymaking and politics

Education has traditionally been viewed as a predominantly national domain of policymaking. In contemporary nation-states, education has assumed a central role in ensuring the stability of the state and facilitating its continuous reproduction (Lawn, 2006, p. 274). Schools have long been key sites for fabricating and sustaining collective national identities, and nation-minded attitudes and emotions fostered in the schooling systems have been essential means for the legitimation of the power structures of modern nation-states (Tröhler, 2020). Popkewitz (2000, 2008) has introduced the notion of national imaginaries to emphasize that nation-state and citizenship are not solely products of geographical location and territorial boundaries. Popkewitz (2000) asserts that schooling plays a crucial role in fabricating nation-state and citizens and shapes shared beliefs and narratives that define these national imaginaries that then contribute to the creation of a nationhood that unites many into one nation.

Over the past thirty years, there has been a notable shift in the education landscape, marked by the ascendance of international organizations as influential actors. National educational policies are increasingly being shaped by transnational entities and global policy discussions, as highlighted by scholars such as Rizvi and Lingard (2010), Mundy and others (2016). This trend is closely linked to the global rise of EBPM and a growing reliance on experts in matters of state. In the contemporary policymaking context, governments actively participate in global educational exchanges and policymaking through various institutions, including the OECD, EU, and the World Bank, as Mundy and others (2016) have pointed out. The adoption of similar education policies on a global scale has elevated such policies to the status of what researchers in education policy and politics term global education policy, as observed by Verger (2014) and his colleagues (2012). This convergence of educational policies worldwide, often also called the global educational reform movement, signifies a widespread diffusion of policy strategies and the commonplace transfer of education policies across national borders (Sahlberg, 2016). As a result, educational reforms have become increasingly interconnected on a global scale, with implications for the scale and space of statecraft, and eventually, for national educational systems.

Within the framework of this study, an example of such global discourse is 21st-century skills and competencies. The OECD, the World Bank, and the European Commission have actively promoted such discourse (Nordin and Sundberg, 2021; Takayama, 2013). Although no common description of these competencies exists, they are often described as a combination of attitudes, abilities, and knowledge required in the future from productive workers and responsible citizens (Anderson-Levitt and Gardinier, 2021). Despite the variation in what is meant by these

competencies, two of the school reforms examined in this dissertation, the 2014 NCC Reform in Finland and Curriculum Renewal and Improvement Reform in 2017–2020 in Norway, were both influenced by the 21st-century skills and competencies discourse, especially in alignment with the OECD version of this discourse (Hilt et al., 2019; Uljens and Rajakaltio, 2017), even though curricula are still considered a predominantly national domain (see Publication II).

EBPM, increasing reliance on experts, and knowledge politics are essential elements in the rise of international organizations as influential players in education reforms worldwide. In recent decades education has become closely linked to the economic, social, and political status of states, leading to increased expectations for measurable results and transparency in education to justify the public money spent on school systems (Wiseman, 2010). Wiseman claims that this development has immensely contributed to the rise of EBPM in education. According to Wiseman (2010), two core beliefs have inculcated that education politics is evidence-based. The first belief is that knowledge taught at schools is abstract and universal, and the second, that empirical evidence (e.g., standardized assessment of learning outcomes) serves as an efficient indicator of knowledge and learning (Wiseman, 2010, p. 1). The fusion of these two concepts has fostered the notion that one can identify successful practices in one setting and seamlessly transfer them to another (Wiseman, 2010). Discourse about "what went right" or "what works" is at the core of education policy lending and borrowing, based on such assumptions of universal transferability of policy solutions across time and space and learning from best practices (Steiner-Khamsi, 2012A). Hence, what-went-right thinking is integrally linked to EBPM and what counts as evidence in school reforms.

Today, organizations such as the World Bank, the United Nations Educational, Scientific and Cultural Organization (UNESCO), and the OECD actively promote their own educational agendas in a variety of ways, and thus exercise their influence on the national level (Morgan and Volante, 2016; Mundy et al., 2016). Lacking any formal authority over sovereign nation-states, international organizations wield their influence subtly, relying on persuasion, a technology of soft power (Nye, 2004; Lawn, 2006; Lawn and Grek, 2012). Soft power is constructed by generating appealing ideas, and it works through attraction (Lawn and Grek, 2012), establishing a realm of significance and meaning that entices actors to not only operate within this space but also engage in its creation (Lawn, 2006).

The co-creation of common meanings and imaginaries is a crucial form of such engagement.In his study on the construction of the European education space, Lawn (2006, p. 273) asserted that creation of shared meanings is "a necessary act of governance and legitimization without which a policy space cannot be created." This study uses a specific region within Europe as its example, the Nordic countries. Yet, it is fair to assume that creation of meaning and collective imaginaries is

likewise a basis for the Nordic education space. Like "Europe," "the Nordic countries" have similarly been a political and cultural project (see Chapter 2), and their certainly exists a collective ideal and regional imaginary of the Nordic that, like Lamy and Laïdi (2002) have discussed for Europe, does involve expert knowledge, regular procedures, and collective and connected actors. As Grek (2013, p. 696) formulates this, soft governing works through attraction, and through "drawing people in to take part in processes of mediation, brokering and translation." Soft power has two essential elements. First, the production of knowledge that is advocated as easily applicable across contexts and in its comparative nature enables governments to monitor the rise or decline of their education systems in rankings; and second, the networks of experts that participate in fabricating, circulating, and disseminating knowledge within and through their professional connections and national contexts.

The extensive production of knowledge that international organizations have instigated is an essential tool of their soft power. In education policymaking, standardized, international large-scale student assessments and comparative rankings have increasingly been exploited as a tool of governance nationally, regionally, and globally (Lingard et al., 2013; Simola et al., 2011; Steiner-Khamsi, 2015). Since the 1990s, the OECD alone has developed several policy instruments, for instance, Education at Glance and the Programme for International Student Assessment (PISA), for monitoring national education policies and promoting specific solutions to national reforms (Petterson et al., 2017; Ydesen, 2019). Previous research has revealed the significant impact and global power the OECD has today, through tools like PISA, on the education policymaking of nation-states (Grek, 2009; Martens and Niemann, 2018; Sellar and Lingard, 2013; Takayama, 2008; Waldow and Steiner-Khamsi, 2019, Ydesen, 2019). The scientific norms of knowledge production, as Holst and Molander (2017) explain, are an essential trait of expert knowledge, which is empirical, quantitative, and comparative. Such knowledge ranks high in what Steiner-Khamsi (2022) has called the hierarchization of information: some types of knowledge are rendered more relevant than others, quantitative traditionally scoring higher than qualitative data.

Cairney and Olivier (2017, Abstract, para. 3) have suggested that for scientific information to be included as evidence in the policymaking process, in addition to having at least a basic understanding of the principles of governing, academics need the ability "to translate complex evidence into simple stories." Espeland (2015) and Stone (2016) have both discussed the reason behind numbers being so highly appealing to policymakers: they fit political narratives and simple stories like a glove. Stone (2016) has pointed out that the power of numbers, statistics and rankings, and any quantitative data, lies in their apparent objectivity, and their power to persuade: what data producers often describe as "raw data" is given meaning by these very same producers attaching a qualitative narrative to that data,

telling the audience what to think of and make out of it. As such, even empirical data is never objective, neutral, or apolitical. Stone (2016, p. 157) suggests that when such data is produced, we should ask ourselves how these numbers came to be (who produced them and what for); what these numbers mean and how they get their meaning; and finally, how these numbers acquire their power. Similarly, Espeland (2015) has underlined the importance of narratives attached to numbers and the process of simplification that allows the elaboration of such narratives. Espeland (2015, p. 56) emphasizes that the appeal of indicators and other numeric data is in their ability to "simplify complex organizations and processes to produce public, authoritative knowledge that makes them appear legible to outsiders." She further explains this as a dual process of first erasing narratives, "the systematic removal of the persons, places and trajectories of the people being evaluated by the indicator and the people doing the evaluation" (Espeland, 2015, p. 56), to then enhance the circulation and adaptation of the numbers to new contexts. Elaborating the simplified data to create new narratives is the second phase of the dual process that gives numbers their power: comparisons across time and space become easy. This is exactly why numbers are so attractive to politicians: any narrative can be attached to them. Hence, Espeland (2015, p. 74) urges scholars to "look at the stories that numbers generate."

This hierarchization of information and power of narrated numbers is in line with the increasing trend of quantification, within which every individual point in the policymaking trajectory involves some kind of calculations and quantitative data (Thrift, 2004). This quantification is closely linked to what several researchers have referred to as *governing by numbers/data* (Ozga, 2009; Shore and Wright, 2015; Simola et al., 2011). In this form of governance, the complexities of reality are distilled into simple indicators and rankings that facilitate management and control (Shore and Wright, 2015). In addition to numbers and quantitative data, an essential trait of education governance today is *governing through comparison* (Carvalho, 2012; Grek, 2009; Martens, 2007; Martens and Niemann, 2013). The OECD occupies a central role in shaping a global education policy framework that relies on standardized indicators strategically employed for comparisons between countries and regions (Martens, 2007). Current trends in education policymaking underscore a constantly growing inclination to validate decisions through the lens of comparative data (Lingard et al., 2012; Novóa and Yariv-Mahal, 2003). Lawn and colleagues (2011, p. 18) contend that cross-border information has assumed unprecedented importance for national ministries of education: a potential consequence may be the outsourcing of rational, high-skilled strategic thinking from the national to the supranational level.

Martens (2007) has argued that through its different knowledge production platforms (statistics, evaluations, reports), the OECD has managed to create a sphere of scientific proof that appears logical and, as such, is not easily contested.

Many of these platforms are based on numbers and comparisons and cater well to governing by numbers and through comparison. The combination of scientific evidence with comparative ranking works well in policymaking, as policy discourses mobilize truth claims and make certain solutions seem common sense, incontestable, and logical (Ball, 2017), to create an illusion that some countries have found the secret of success for what works. The use of quantitative data in political narration is, however, not innocent nor without consequences. They enable the emergence of some narratives and in their indisputability, silence others. As Gorur (2015, p. 591) has asserted, "what gets left out from calculations would arguably lose importance and currency in the minds of the public and policymakers": policy convergence is tightly connected to comparative charts, as they "promote associations that might not have been made otherwise," which is exactly what comparative data does.

As noted earlier in this dissertation, researchers have questioned to what extent education policy and politics are still in the hands of national governments, and how tight the grip the international organizations is on, for instance, national school reforms. Previous researchers have established that the state is still important, but its role, and the forms of governing it exercises, have changed (see for instance: Dale, 2009; Lingard, 2021A; Rinne et al., 2019). For instance, Ball and Junemann (2012) have argued that a transition has occurred from traditional government towards network governance. This can be witnessed in a shift from the traditional form of government based on hierarchical and bureaucratic state-led administration, towards governance "accomplished through the 'informal authority' of diverse and flexible networks" (Ball and Junemann 2012, p. 168) that can include private business partners in public policymaking. Dale (2009) has described this development as a shift away from the state monopoly over collective decisions to address societal issues: instead, a range of societal actors are engaged, occasionally even sidelining state governments in the decision-making.

Menashy and Verger (2019) emphasize the increased prominence and intensity of networks arising from globalization and NPM (see Chapter 5.1). The transformative nature of governance is further underscored when they highlight the profound shift towards governance where "policy-making occurs beyond the jurisdictional boundaries of state institutions and the rule of law" (Menashy and Verger, 2019, p. 59). Moreover, policy influence is redirected through soft power mechanisms, such as knowledge mobilization, framing, and persuasion, denoting a departure from traditional governance structures, signalling a more dynamic and interconnected landscape shaped by global influences and new modes of governance (Menashy and Verger, 2019).

This leads us to the second way in which international organizations and other non-state policy advocates harness their soft power, which is the mobilization of knowledge through interconnected networks of actors. Although they often pose as

neutral knowledge intermediaries, international organizations aim to influence public policy and promote their preferred policy solutions using knowledge as the instrument of influence, as noted by Menashy and Verger (2019). Another tool for influencing non-state advocates is to organize opportunities for social encounters and networking to form alliances through meetings, seminars, or trainings (Menashy and Verger, 2019), which Grek (2012) has called learning by meeting, and to enhance consensus, for instance on what improvement in education is and how systems should be reformed to reach certain standards.

The link between the new forms of governance and EBPM in education has to do with the production of knowledge and knowledge hierarchy. Ozga notes that the shift from bureaucratic forms of governance to post-bureaucracy manifested not only in a shift to a polycentric governance, in which the state no longer holds the central position and monopoly over governance, but also through the production of pluralistic, flexible, and future-oriented knowledge (Ozga, 2011 as cited by Grek, 2013). Importantly, this knowledge is inherently comparable, enabling it to swiftly traverse boundaries, deriving legitimacy not only from scientific research but also from practical know-how and experience (Grek, 2013; Grek and Ozga, 2010). Furthermore, the considerable uncertainty enveloping most education debates and policy challenges, coupled with the escalating demand for EBPM and the overwhelming amount of (scientific) research that does not offer definitive conclusions, has created a fruitful environment for knowledge-brokering organizations and experts to step in as policy advisors (Menashy and Verger, 2019).

All in all, relationality plays a significant role in relational policy fields where ideas move around and "either become extinct or rule" (Grek, 2013, p. 707). In today's policy landscape, the interplay between local and global, along with the involvement of both national and international actors in policy processes, has prompted questions about the methodological, theoretical, and conceptual approaches needed to understand the complexities of decision-making in education. Larsen and Beech (2014, p. 85) have argued that much previous research on education transfer has been based on the view that ideas are produced in one place and then transferred to another. Beech and Artopoulos (2016, p. 251) add to this thought by stating that much work in comparative research has been centred around the nation-state and based on "territorial and geopolitical definitions of space" and "static definitions of transfer," while ideas endorsed by international organizations are often shaped, disseminated, and promoted by individuals from specific local contexts. Sassen (2007, 2013), too, stresses that what we often perceive as a global influence, is national actors doing global policy. Furthermore, previous research on education transfer and policy adoption has demonstrated that national policymakers are selective in their use of evidence and adoption of policies advocated in the global education policy movement (see, e.g., Karseth et al., 2022; Verger, 2014; Waldow and Steiner-Khamsi, 2019). Thus, it is inaccurate to assume

that neoliberal policy discourses and market-oriented solutions are purely global (Beech and Artopoulos, 2016). Rather, they take shape in assemblages of expert networks, competing knowledge, and power structures, within which the binaries of global/international and local/national intertwine and are obscured. Beech and Artopoulos (2016, p. 253) have suggested that it is crucial to explore the relational dimensions of processes of knowledge construction and to understand that "it is in the communicative process that ideas about education are constructed and that the ways any channels through which these ideas are conveyed contribute to shaping educational knowledge." They underscore that "networks are not contained within space, networks produce and shape space. Thus, from a relational perspective, there is no such thing as an absolute space, rather different networks coexist, making different spaces" (Beech and Artopoulos, 2016, p. 261).

This takes us back to the evidence, expertise, and construction of policy space, and Stone's (2016) suggestion that we ask ourselves how numbers acquire their power. The use of numbers in state governance is by no means a new phenomenon. But numbers were harnessed to serve neoliberal regimes to implement NPM, and "the technologies of numbers escaped to become a hegemonic force in their own right in all aspects of social life, crafting and determining it" (Piattoeva and Boden, 2020, p. 4). Specifically in education, Popkewitz (2012, p. 170) claims numbers are used to narrate "truths" that education fabricated specific kinds of human beings through systems of reason that order, classify and divide them. He asserts that numbers exist in "a set of cultural practices that generate principles about what is thought about, hoped for, and acted on" (Popkewitz 2012, p. 171). One may perceive this to apply to all knowledge used as the evidence base for school reforms, although, as this study shows, the knowledge valued and employed as evidence tends to be numeric and empirical. All in all, what counts as true knowledge is increasingly negotiated, co-created, and disseminated within and through networks of experts, and evidence contains much more than just knowledge artefacts valued as true answers for sought-after solutions, or tacit knowledge gained through long working experience. Such truths in education are co-created in transnational networks of experts and assemblages of knowledge, the essence of the truth drawing its power from catchwords: "scientifically proven" and "evidence-based."

5.3 Space/time, forerunners of progress, and globalization

Globalization has been used so frequently as a catchword in politics that it has nearly become an empty signifier (Lingard, 2021A; Popkewitz, 2004). Similarly, its effects are sometimes explained through a grand narrative of globalization as an overpowering force independent from national actors and realities (Bayly et al. 2006). In education studies, such a grand narrative could lead a researcher to

assume that neoliberal discourses in education are purely global, an assumption that Beech and Artopoulos (2016) have emphasized to be flawed. My take on globalization in this dissertation is based on the relational notion of space (Larsen and Beech, 2014) and stems mainly from the work of Saskia Sassen and Doreen Massey. In addition to their theories, I drew my inspiration for the spatial reading from the concept of "fast policy worlds" by Jamie Peck and Nik Theodore (2015) and from the assemblage approach to theory and methodology. Instead of trying to define what globalization *is*, this dissertation focuses on what globalization *does*, and even more precisely *how globalization is done* in education through assemblages of evidence, expertise, and school reforms within what Massey (2005) called "space/time."

Previous research in comparative education on policy borrowing and lending has made it abundantly clear that the nation-state can no longer serve as the self-evident starting point in education policy studies and more of a relational perspective on space is required. This has in recent years increased the interest in spatial theories and methods, first, to avoid methodological nationalism (Anthias, 2009; Dale and Robertson, 2009; Wimmer and Glick Schiller, 2002); second, and somewhat later in the evolution of the comparative education, to address methodological globalism (Lingard 2021A; Takayama and Lingard 2021; Clarke 2019). Quite recently, Lingard (2021B) questioned the hegemony of spatiality in education policy research, highlighting the significance of temporality. Lingard (2021B) expressed a concern that the prevailing interest in spatiality may have inadvertently caused researchers to disregard other equally important aspects of education policy and politics, namely temporality and historicity.

Much of the work on spatiality in education has utilized the writing of the post-structural and feminist geographer Doreen Massey. While Massey's ideas have previously been employed in education policy studies to unravel the intricacies of globalization, only a fraction of her extensive work has been utilized for this purpose. In this discussion, researchers especially cite two of her definitions of space: as "the social stretched out" and as a "product of interrelations and constituted through interactions" (Massey 1994, p. 2). These definitions have been used to promote new methods of analysing education policy that better capture the transnational and networked nature of national decision-making in a globalized world. For Massey (1994, p. 2), social phenomena and space are constituted out of social relations and "since social relations are imbued with power and meaning, this view of the spatial is as an ever-shifting geometry of power and signification." This take on spatiality is undeniably helpful for understanding changes in education in an era of globalization. Viewing space through a social lens and understanding social interactions in spatial terms directs our focus toward the interconnected dynamics and relationships involved in the creation, distribution, and consumption

of education, and highlights how the structure of educational systems is shaped by a complex interplay of strategies and ongoing struggles (Robertson, 2006).

The temporal dimension within Massey's conceptualization of space, however, has escaped the attention of many researchers of education policy and politics, including myself. My application of Massey's thinking was certainly rather limited in publications I and II of this dissertation. Yet, as my research journey proceeded, I grew to understand that Massey does more than propose we look at the social and relational aspects of space. The temporal aspect is so central to Massey's thinking, that she coined the concept of space/time (Massey, 2005; Massey, 1994), to stress the intertwined nature of the two and to draw our attention to the innate temporal temporality and historicity of space. She advocated persistently against oversimplified perspectives that pit time against space, or sustain any other dichotomies that interfere with our ability to embrace multiplicities that define our existence (Massey, 2005; Massey, 1994). Massey's work poses a challenge to the human mind that is accustomed to linear narratives. She invites us to evolve from thinking of time as linear, and space as a static surface, into perceiving space as thoroughly permeated by time and as "a meeting-up of histories" (Massey, 2005, p. 4). This stretch to my thinking is still very much a work in progress.

Indeed, our perception of time and space influences how we view globalization, progress, and reforms in studies of education policy and politics. In Chapter 5.2, I discussed the process of simplification in EBPM and the one-dimensional, linear idea of progress in education promoted by many international organizations. Massey's theorization of progress and globalization may assist us in understanding the dominant global discourses of linear reform and progress; there are alternatives, but to reach them, a shift in thinking is needed in our own "spatial empires of the mind" (Larsen and Beech, 2014, p.75). A dominant Western view of space is of a surface to be crossed, discovered, and conquered (Massey, 2005). Such imagination entices us to perceive other places, people, and cultures as phenomena on this surface called space; just lying there waiting to be discovered. (Massey, 2005; Warburton, 2013.) In this view, other places are deprived of their histories and trajectories, and the world from the multiplicity that constitutes space/time (Massey, 2005). In a 2013 Social Sciences Bites podcast, Massey explained that a great part of her mission has been to dynamize space and bring it to life, to stress its dynamic nature, instead of accepting the common view of space as static, continuous, and given (Warburton, 2013).

Specifically regarding globalization, Massey (2005) emphasized that nearly every local place plays a role in shaping what we commonly refer to as the global. That being the case, it is crucial to grasp the idea that the global is not just distant and out there; it is just as much a product of local processes and influences, and vice versa. Furthermore, Massey emphasized that globalization does not manifest itself uniformly or yield identical outcomes across all regions, nor is the idea of progress

uniform and identical throughout the globe and in different contexts. According to her perspective, fostering such a uniform view detaches places from their unique historical contexts and obscures the multitude of diverse relationships, histories, and realities that are of and exist within space. (Massey, 2005, 2007.)

Saskia Sassen's (2007) sociological theory on globalization aligns well with Massey's theories. In her work, Sassen (2013) argues that we should not perceive the global and the national as mutually exclusive, but conceives globalization as emerging from inside the national. Rather than superficially incorporating transnationalization or global interdependence to counter methodological nationalism, Sassen (2013) contends that the emergence of globalization can be comprehensively understood within national frameworks and institutions. She specifically encourages researchers to scrutinize "the multiple national conditions and dynamics that are likely to be engaged by the global and often are global as it functions inside the national" (Sassen, 2013, p.33). Building on these ideas, Sassen (2013, 2007) proposes that globalization comprises two distinct sets of dynamics. The first involves the formation of global institutions and processes (Sassen, 2013, 2007), exemplified in education policy politics by entities such as the OECD and global assessments like the PISA tests or other international rankings. These formations, institutions and processes are typically considered vehicles of globalization.

The second set of dynamics is often overlooked as part of the formation of the global, since it unfolds within national constructs, and operates deep within territories and institutional domains that are constructed in national terms. Despite their seemingly localized nature, "they involve transboundary networks and formations, which connect or articulate multiple local and subnational processes and actors" (Sassen, 2013, p. 27). Sassen has encouraged researchers to pay attention to this second set of dynamics in order to understand how globalization actually works. She stresses specificity and precision in scrutinizing globalization as a complex dynamic that manifests especially in the moments of denationalization of what has traditionally been perceived as part of the national policy space (Sassen, 2013, 2007). Instead of advocating for new methods to produce research data, Sassen (2013) has emphasized the importance of rereading existing quantitative and qualitative data and careful decoding of the specific moments of denationalization through which the global emerges within the national. A central task of such an approach is "to decide particular aspects of the 'national,' which may have shifted away from what had historically been considered or constituted as national" (Sassen, 2013, p. 32).

In this study, I have identified school reforms and, in Finland and Norway, curriculum reforms, as such aspects of the national. As explained in Chapter 5.2, education systems have traditionally been perceived as a national domain, but in the last three decades this perception has been challenged by the increasing power

that international organizations have gained through systematic knowledge production and the heightened demand for knowledge they produce due to the EBPM paradigm. In this dissertation, I decode two specific elements of denationalization in the globalization of national policy processes. The first element is the evidence used in policy reform proposals. The second element is the social encounters and meeting places within which knowledge is co-created and disseminated. I reread the bibliometric and interview data produced within the POLNET project through assemblage theory, to explore space and place as social, relational, and shaped by geopolitics and global power structure.

Sassen (2013, p. 33) has argued that understanding globalization as emerging within the local and national "opens up the possibility of national actors doing global politics from inside the national." As Beech and Artopoulos (2016, p. 256) point out, local experts both participate in the production of ideas and endorse them in their national context. To stay open for the possibility of national actors doing global politics within national, regional, and global spaces of policymaking, however, to Sassen's suggestions I add Massey's conceptualization of place as a specific constellation of trajectories and meeting-up of histories, as well as Peck and Theodore's theory of fast policy worlds and the compressed moments in policymaking that tie together the national and the global.

Massey's views space as both temporal and social, arising from interrelations; as we have seen she describes places as characterized by "throwntogetherness" and a "global sense of place" (Massey, 2005, 2007). While actors may somewhat coincidentally gather in a place, global power structures intersect within it (Massey, 2005). Massey (2005; 2007) used cities like London and Hamburg to illustrate these elements of global place and to explore the dual dynamics of "the world coming to" these places (meaning people from all around the world converging in these places and bringing their personal histories, their life stories and experiences, and their connections to place) and "the lines that run out" from these places globally (the actions and decisions taken in one place link to and affect other places). Connecting Massey's ideas to social network analysis, actors in networks bring their personal histories, previous encounters, and cultural backgrounds to a place. All of these intersect, forming what Massey (2005, p. 151) referred to as a "constellation of trajectories."

Hence, place can be understood as specific nodes within space/time. Even though Massey never explicitly committed to a single definition of place, within the framework of Massey's spatiotemporality, I view places as unique and specific moments of compression of space/time that come into existence through social interactions and a complex interplay of individual and collective trajectories. These trajectories encompass the ever-evolving movement and the continuous process of becoming and are simultaneously global, regional, and national. This perspective acknowledges that while the essence of places is in part inherently contingent, even

somewhat coincidental through the principle of throwntogetherness, their nature is also influenced by the historically established and maintained power structures and geopolitical configurations.

Peck and Theodore (2015) have delved into similar compressions of space/time, namely the meeting grounds in global policymaking, and approached them from a temporal angle. They have introduced the concept of reconstituted fast policy worlds to capture the ongoing surveillance, mutual learning, and global propagation of best practices. It is worth noting that the term "fast" in their thinking does not refer to speed, but rather, to the intensification of long-distance connections. This intensification manifests in the expanded reach and extended scope of mobile policy frameworks, routines, and models. The concept of fast policy worlds also acknowledges the heightened immediacy, significance, and even sense of urgency of policymaking moments that Peck and Theodore see as having become increasingly intensified and compressed. These fast policy worlds are characterized by transnational policy discourses and globally connected, cosmopolitan actors. Within these contexts, successful policy models are forged through discussions and debates that circle identifying best practices and establishing standards. After scrutinizing the dynamics of how novel policy concepts circulate, particularly two specific economic policies, namely cash transfer solutions and participatory budgeting, Peck and Theodore conclude that even when policymakers adopt these ideas by referring to successful models and experiences from distant locations, straightforward replication is not the norm. They assert that the outcomes of policies remain context-specific and it is hard to change the stubbornly localized aspects of policymaking. (Peck and Theodore, 2015.)

The findings of Peck and Theodore (2015) illustrate the theoretical and methodological challenges that researchers face in their quest to understand the intricacies of today's policymaking. As discussed in Chapter 5.2, in comparative education and education policy studies, the debate has circled on the role of the nation-state and how much influence international organizations and other transnational actors have in the formulation of national policies. The soft power of international organizations like the OECD and the European Commission has been thoroughly demonstrated by previous research, but the conclusion seems to be that although they undeniably affect them, they do not determine national policies. The state is by no means irrelevant or powerless, but education policy and politics are also not solemnly the national domain it traditionally has been understood to be. (Lingard, 2021; Rizvi and Lingard, 2010; Karseth et al., 2022; Steiner-Khamsi, 2012B.) Policy assemblage studies complement these research findings in education and globalization.

5.4 Policy assemblage thinking and the education policy studies in ear of globalization

In her theorization on globalization, Sassen has utilized the concept of assemblage to actively disrupt established categories and definitions, particularly "territory" (Aneesh, 2017, p. 128). Territory as a concept is often associated with the nation-state and its sovereign geographical jurisdiction. The notion of destabilizing these self-evident, hierarchical categorizations of the global, regional, and national, combined with Massey's (1994, 2005) exploration of space as socially constructed and characterized by multiplicity, initially attracted me to assemblage theories. This framework guided my exploration of policy studies that employ assemblage thinking to examine what Gorur (2011) terms "policy doing," highlighting the dynamic nature of policy processes and the practical work of policymakers. This phase of my theoretical journey posed the greatest challenge, given the multitude of applications of assemblage concepts and the absence of a universally agreed-upon definition, akin to the conceptualization of policy itself. Throughout my exploration, I remained committed to my initial decision not to pit one theory against another but to engage them in dialogue (Barad, 2007). Therefore, my application of assemblage thinking cannot be attributed to a single school of thought. Nonetheless, my primary inspiration comes from previous studies in education policy that utilize assemblage theory developed by Gilles Deleuze and Félix Guattari.

Recent interest in assemblage theories and methodologies has grown so much that Savage (2020) suggests the emergence of a distinct field dedicated to policy assemblage. This burgeoning field holds particular appeal for researchers studying globalization in education, especially as the interconnectedness of the global and the national garners increasing attention. From my perspective, assemblage thinking complements the notion of space as inherently social and perpetually evolving (see Chapter 5.3). Regarding spatiality, Allen (2009, p. 207) adds that within assemblages, power is not imposed over space (e.g. from global to national) but emerges relationally through interactions. Savage (2020, p. 328) underscores that when applied to studies of policy mobility and globalization, this understanding of power suggests a decentralized, polycentric structure lacking a singular governing centre, with power dispersed across multiple nodes and centres throughout space.

My exploration of how the concept of assemblage operates in the globalization of ideas about education reform was initially inspired by DeLanda (2016). Only later, I encountered other authors more loyal to the original assemblage theory of Deleuze and Guattari. According to DeLanda (2006), an assemblage connects autonomous components by establishing relations between them, characterized by external relations that allow for integration into new configurations (Savage, 2020).

These relations are contingently obligatory rather than necessary (DeLanda, 2006, p. 11). Using political alliances as an example, DeLanda (2006, p. 2) defines exteriority as "a relation between two groups, like the air between them transmitting influences that connect but do not constitute them." Central to DeLanda's assemblage thinking is the concept of emergent properties, where the whole emerges through interactions between its parts (DeLanda, 2016, p. 9). These emergent properties and the transmission of influences have policy consequences, as the specific arrangement of autonomous components within an assemblage facilitates some possibilities while making others improbable (Rabinow, 2014, p. 206).

Savage (2020) emphasizes that parts of an assemblage interact and possess capabilities differently when combined differently. This aligns with the notion of policy as a process (Taylor et al., 1997; Considine, 1994). Such assemblage thinking does not necessarily prioritize humans, but views non-humans as equal components of assemblages (DeLanda, 2016; Fox and Allerd, 2017). National education policies, for example, are crafted by integrating diverse components such as laws, prior policies, stakeholders, organizations, and governance tools. Adjustments to this amalgamation yield varied characteristics and policy outcomes (Savage, 2020). Assemblages are in a perpetual state of becoming, and are defined by heterogeneity, relationality, and flux, as emphasized by Paakkari (2020) and underscored by Savage (2020).

Buchanan (2015) – pointing out weaknesses in DeLanda's work – argues that "assemblage" is often used merely to convey complexity, overlooking its original emphasis on power in Deleuze and Guattari's theory. Deleuze and Guattari (1987) are most interested in what holds components together in assemblage and the limits of such assemblages, alongside considerations of power, desire, and processes of deterritorialization and reterritorialization. This leads to a consideration of the loss in translation of Deleuze and Guattari's original concept, *agencement*. Several scholars have noted that the English translation, assemblage, fails to capture its dynamic and processual nature (Buchanan, 2015; Thompson et al., 2022; Paakkari, 2020). As DeLanda (2016) observes, the English translation might suggest that assemblage refers to a product rather than a process. However, Deleuze and Guattari (1987) originally argued that we can only understand what an assemblage is by observing what it does. In essence, "assemblages have no fixed essence and can only be understood through their operations" (Paakkari, 2020, p. 20). Therefore, assemblage could equally be translated as arrangement, specifically emphasizing its ongoing and dynamic nature as a working arrangement rather than a static state (Buchanan, 2015).

Drawing on these elements of Deleuze and Guattari's thinking, Thompson and colleagues (2022) challenge the view of assemblages as systematic entities, using the example of a classroom to illustrate that, rather than static structures,

assemblages are dynamic working arrangements shaped by forces and desires that extend beyond their conventional components. They have pointed out that much more research on education policymaking is needed that considers desire as a driving force (Thompson et al., 2022). Desire, understood not merely as a yearning for something lacking but as a productive force capable of reshaping social orders by dismantling established sectors, is central to assemblage theory. Initially introduced in "Anti-Oedipus," (Deleuze and Guattari, 1983) the notion of desire was elaborated upon in "A Thousand Plateaus," evolving into the concept of assemblage (Deleuze and Guattari, 1987).

As Jackson and Mazzei (2012, p. 88) elucidate, "The desiring machine is that which provides connections for a plugging-in of forces, flows, and intensities. The machine, as such with no subjectivity or center, is a hub of connections and productions – it deterriorializes and presents the possibility for transformation, proliferation, and becoming." This citation illustrates that in Deleuze and Guattari's assemblage thinking, territory is a concept that goes beyond destabilizing existing spatial categories and definitions. It has little to do with the space in terms of a piece of land or a geographical state. Rather, in their thinking territory is constantly in a state of becoming through the process of de- and reterritorialization and is intimately entangled with our desire to live with the chaos of life, possibilities of change and sense of purpose within the chaos of life (Buchanan 2020; Deleuze and Guattari, 1987). In de-/reterritorialization, established territories, structures, or frameworks are destabilized, allowing for the creation of new ones, and making space for change. The process involves disengaging elements from their established contexts, paving the way for reterritorialization, and establishing new territorial boundaries, structures, or frameworks to materialize change within the existing social structures (Deleuze and Guattari, 1987). As Buchanan (2020, p. 98) formulates, "territory is an act, a passage, not a space. It is the composition of one's own world."

Understanding territory not as a traditionally spatial, but as an act of desire to live with the chaos of life and the attempt to compose one's world, has much to offer relational analysis of space and power. Thompson and colleagues (2022) delve into the application of Deleuze and Guattari's concept of assemblage within the realm of education policy studies, focusing on the OECD. In their study, they illustrate how the OECD functions as both a force of deterritorialization and reterritorialization. By breaking down national barriers and fostering shared beliefs in social progress across borders, the OECD acts as a conduit for the harmonization of ideas. Within this framework, PISA emerges as a significant apparatus that consolidates the varied desires constituting the OECD, and shapes its contours and coordinates. At the heart of the OECD's influence lies desire – a specific societal vision upheld by member states and reinforced through the organization's endeavours (Thompson et al., 2022, p. 699). Applied to education reforms, as in this study, it is this desire

for a particular kind of societal progress that motivates member states to engage and become part of the OECD's collaborative efforts, and the global education reform movement (Sahlberg, 2016).

Investigating how assemblages maintain coherence and consistency is crucial for analysing policy formations. Thompson and colleagues (2022) utilize Deleuze and Guattari's concept of the "plane of consistency," which denotes the sense of harmony and stability achieved within an assemblage, even without explicit rules. Soft governance relying on persuasion, a concept discussed by Lawn and Grek (2012), can be seen as an attempt to achieve harmonization and stability within assemblages like the OECD. Understanding how novel and seemingly illogical associations form within different components can reveal the limits of assemblage arrangements (Buchanan, 2015), making it a key question when studying policy assemblages (Thompson et al., 2022). Similarly, Baker and McGuirk (2017) advocate for a methodology focused on what they term "labours of assembling" (discussed in Chapter 6).

Both Buchanan (2015) and Thompson and colleagues (2022) stress the importance of conceptual and theoretical clarity to move beyond merely stating the complexity of policymaking. Assemblage theory, as Buchanan (2015) notes, should offer analytical insights, and not contend to stating the obvious by merely describing the complexity of today's policymaking (Thompson et al., 2022). As stated earlier, the aim of this dissertation is not to pinpoint an exact definition of globalization, or to look at the global education discourses often described as neoliberal. Instead, the focus here is on *how globalization is done* in education through assemblages of evidence, expertise, and school reforms within what Massey (2005) called space/time. This study delves into the work of arranging and rearranging education policy within different spaces and places of policymaking. In the upcoming chapters, I explore the possibilities of using the theoretical framework presented in this chapter to analyse empirical data. I examine bibliometric and interview data concerning the utilization of evidence and expertise in Nordic school reforms and explore the co-creation of policy space in the policy work done on drafting research proposals. Next, I move on to my methodological journey guided by these theoretical starting points.

6 Research assemblage and the methodological journey

6.1 Research process and the methodological journey

Kauko and others (2018; p. 19) remind us that sharing the research journey is required to ensure the validity of the research project: to their mind, sharing such a journey "is as important as arriving at our destination." My research plan was certainly not coherently set in stone from the get-go and executed in the designated order of carefully considered methodological steps. Rather the whole research process was indeed a methodological journey. It started with my long-term theoretical interest in the questions of globalization and education, and the methodological choices set by the POLNET project. From then on, it turned out to be what Law (2004, p. 11) has invited method to be, a vulnerable, diverse, and uncertain exploration. A journey that evolved and expanded as this work proceeded, in which I alternated between the joy of discovery and the shadow of self-doubt. Each answer sparked more questions. Each new question seemed to call for new methods. Each finding called for new theoretical tools, and for a new reading. Finally, at the end of this journey, I had a feeling I ended up offering fewer closed answers, and more open questions. In that sense, this dissertation can be viewed as an assemblage, open and in constant flux, inviting readers to expand and enhance it as they delve into the text and possibly continue the work done here.

In recent years, several researchers in education policy studies, both in comparative education and critical policy sociology, have called for new methods and methodologies to understand the complex space of education policymaking in an era of globalization and transnational connections (see, e.g., Gulson et al., 2017; Rizvi and Lingard, 2010). In some texts, however, the terms "method" and "methodology" appear to be used interchangeably, with a primary emphasis on introducing innovative data production methods, such as various network analysis approaches. I believe it is important to distinguish the two concepts for methodological and conceptual clarity.

My take on methodology stems mainly from Addey and Piattoeva (2022), and Skeggs (1995). Addey and Piattoeva (2022, p. 2) explain that they use the term methodology "to indicate the scientific processes through which empirical evidence

is sought to answer the research question" and refer to Law's definition of methodology as "practice of methods." Skeggs (1995, p. 3) claimed that in terms of feminist research, "there is a serious lack of work that interrogates its theoretical production." In her definition, "methodology is a theory of methods which informs the decisions about such things as what to study, how to analyse, which theories to use, how to interpret, how to write" (Skeggs 1995, p. 2). Hence, by methodology, I mean the whole research journey, from asking the first questions, to methods and theories chosen, to reading the findings from the substudies and thinking with theory to reach overall findings for this dissertation, all the way to the reflections presented at the very end of this journey. It is guided by epistemological and ontological starting points (see Chapter 3). How I write about this journey has also been an integral part of my methodology in the making.

With the term method, in this study I refer to two things; 1) the methods of data production; and 2) the methods of data analysis. One of the main objectives of this dissertation was to stretch beyond both methodological nationalism and globalism, to overcome the limitations of my own view of space, and imagine the world differently, beyond the dichotomy of the global and the local (Larsen and Beech, 2014). For these attempts, I utilized several different methods of data production and analysis. These methods included some traditionally used in policy analysis (expert interviews and content analysis), as well as other more novel methods that recently have become more popular in education policy studies (social network analysis and bibliometric analysis). In general, this research combines methods stemming from both quantitative (bibliometric and network analysis) and qualitative (content analysis of policy documents and expert interviews) traditions. Hence, the method of data production might be characterized as mixed-method social network analysis (Froehlich et al. 2020). However, the key element of this dissertation was an overarching reading of the findings of the substudies (publications I–III) through policy assemblage theories and spatiotemporality (see Chapter 5). This reading eventually breathed life into this research and allowed me to gather my scattered thoughts into a coherent research assemblage. My reading was methodologically inspired by policy assemblage research (Fox and Allerd, 2017; DeLanda, 2016; Baker and McGuirk, 2017; Savage, 2020), and the "thinking with theory" approach by Jackson and Mazzei (2012) and in addition to assemblage thinking and methodology, theoretically informed by the spatiotemporal theories of particularly Doreen Massey, Saskia Sassen, Karen Barad and Jamie Peck and Nik Theodore.

Assemblage methodology emphasizes the researcher and the writing process as part of the research assemblage and as an undeniable intervention in the phenomenon the researcher studies. Such a methodological approach requires deep self-reflection beyond what has traditionally been customary in education policy studies. Addey and Piattoeva (2022) emphasize that within this academic tradition,

there is a tendency to conceal ourselves within how we write out our methodology. Skeggs (1995) urges researchers to consider how the "politics of positionality" influence their interpretations of texts and theories, and the way they write. She contends that even abstract theoretical frameworks are inherently linked to our social positionings, which shape our methodological decisions and research output, all the way to how we write out the results of our research process. Furthermore, in doing research we do not remain unchanged. The act of engaging in research transforms the researcher, and the creation of knowledge and dissemination of our findings impact the researcher's evolution and very identity. As Addey and Piattoeva (2022, p. 2), masterfully formulate this, "knowledge-making is performative, that is, acting upon the world in one way or another."

In Chapter 4, I cited the epistemology of Barad (2007, p. 185), that we only know by being "of the world." Surrendering to this type of knowing and being in the world requires resisting the temptation to stand outside of it. By embracing as truth that knowing emerges from being of the world, we accept that there truly is no bird-eye view or observer position to hold and that we need to let go of "doing education policy research that simplifies the world" and any methodological "gaze above and across space" (Carney, 2019, p. 252). Being of the world pushes us to examine the co-creativity embedded within our methodological choices. Gorur, Sellar and Steiner-Khamsi (2018, p. 6) have claimed that: "worlds and methodologies are co-produced." To add to this thought, part of this co-production is the constant becoming and evolving of the researcher, certainly in the earlier stages of their academic career. In addition to the work of producing academic knowledge, this research was identity work in the deepest sense as described by Thompson and Kamler (2010). They describe this as a struggle for doctoral researchers, because while doing their research, they also write themselves a new identity, as academics. Hence, I would like to add to the claim of Gorur and others (2018) cited above by saying that through research, worlds, methodologies *and researchers* are co-produced and co-created. As such, research on policy assemblages is an assemblage itself, an act of assembling (Greenhough, 2012), weaving together theories, concepts, methodological choices, the researcher and the researched.

6.2 Selection of reform cases and the policy documents

This study was conducted within the international research project Policy Knowledge and Lesson Drawing Nordic School Reform in an Era of Global Comparison (POLNET). POLNET aimed to compare the reception and translation of different types of policy knowledge in Nordic countries by analysing the citation patterns found in the collections of governmental papers that played pivotal roles during education reform processes (Sivesind and Karseth, 2022). For this dissertation, the initial choices of POLNET influenced the choice of cases, policy

documents, and informants, as well as the coding process of the bibliometric references. However, as explained in Chapter 6.1, my methods and methodology evolved during the research process. This evolution can be detected in the three publications of this dissertation as each substudy continued and expanded from where the previous one had ended. The methods of data production and analysis employed, as well as the data used in each article, are summarized in Table 1.

Table 1 Focus, Data and Method of Analysis of Each Substudy and Their Correspondence to the Main Research Questions of the Dissertation.

Publication	Focus of the substudy	Data	Method of analysis	Research questions
I	Evidence and expertise valued in 2014 NCC reform	10 key policy documents	Bibliometric analysis and social network analysis of 677 cited references; analysis of the affiliations of the most published authors; analysis of the titles of the publications; content analysis	1
II	Role and influence of Nordic cooperation in recent education reforms	18 elite interviews from Finland, Iceland, and Norway; 225 cited Nordic references	Bibliometric analysis and social network analysis; qualitative, thematic analysis of the elite interviews	2
III	The interplay of the national and the global through the position of experts as policy translators	11 elite interviews from Finland and Norway	Dialogical thematization (Koski, 2011) Thinking with theory (Jackson and Mazzei, 2012)	3

The first step was to identify the latest comprehensive, or basic, education reform in each Nordic country. For the first substudy, the reform of the NCC in 2014 was chosen as an example of a recent reform in the Finnish context. The next step was to identify the relevant documents for further systematic analysis, that is, the white papers and green papers in each national reform. As no universally agreed definition of white and green papers exists, an interpretation was made that "in the Nordic contexts, white papers are documents produced by governments to legitimize political recommendations that are reviewed and debated in

parliamentary processes" (Sivesind and Karseth, 2022, p. 2). Green papers were defined in POLNET as public inquiry reports that were mostly written before the white papers "to evaluate and clarify pros and cons of various options and solutions" (Sivesind and Karseth, 2022, p. 3).

Further choices had to be made about what this exactly meant in the Finnish context. Our team made an interpretation that in the Finnish policymaking context, a draft for new legislation or a decree corresponds to a white paper. The NCC 2014 was not a policy document that was brought to the parliament for discussion, nor was it a draft for a new law or decree. The policy document closest to a white paper in Finnish education politics was the proposal for the general national objectives of the NCC. Our team chose to focus on the proposal produced by the ministry-assigned working group on Future Basic Education (Opetus- ja kulttuuriministeriö, 2012) and view it as a white paper. This white paper identified the general national objectives, presented a proposal for renewed distribution of lesson hours, and suggested the necessary decree changes for the Government Decree on the National Objectives for Education Referred to in the Basic Education Act and the Distribution of Lesson Hours (Valtioneuvoston asetus 422/2012). It was reviewed and debated in the parliament before it was accepted and passed. The white paper was the first concrete step in the whole curriculum reform process and set the framework for reforming the actual content of the NCC. The green papers (GP) were identified from the in-text citations of the white papers (WP). Nine documents were identified as corresponding to a green paper and hence suitable for analysis. From all the in-text citations, we determined the green papers based on three criteria: 1) the document provided relevant information and suggestions for the curriculum reform, 2) the document contained a list of references or references in footnotes, 3) the document was related to the white paper, in the sense that it offered background information for it.

The selected documents for the Finnish case were:

WP	Tulevaisuuden perusopetus [Future Basic Education]
GP1:	Perusopetus 2020 – yleiset valtakunnalliset tavoitteet ja tuntijako [Basic Education 2020: Common National Aims and Distribution of Lesson Hours]
GP2:	Opinto-ohjauksen arviointi perusopetuksessa, lukiossa ja ammatillisessa koulutuksessa sekä koulutuksen siirtymävaiheissa [Evaluation of Student Counselling in Basic Education, Upper Secondary Schools, Vocational Education, and in Transition Phases of Education]

GP3: Onko laskutaito laskussa? Matematiikan oppimistulokset peruskoulun päättövaiheessa 2011 [Are Mathematical Skills in Decline? Mathematics Learning Results at the End of Basic Education in 2011]

GP4: Aihekokonaisuuksen tavoitteiden toteutumisen seuranta-arviointi 2010 [Evaluation of Achievement of Overarching Education Goals 2010]

GP5: Opettajat Suomessa 2010 [Teachers in Finland 2010]

GP6: Esi- ja perusopetuksen opetussuunnitelmajärjestelmän toimivuus [Evaluation of the Curriculum of Pre-School and Basic Education]

GP7: Liikunnan oppimistulosten seuranta-arviointi perusopetuksessa 2010. Koulutuksen seurantaraportit 2011:4 [Evaluation of Learning Results in Physical Education 2010. Educational Evaluations 2011:4]

GP8: Luonnontieteiden seuranta-arviointi [Evaluation of Natural Sciences]

GP9: Historian ja yhteiskuntaopin oppimistulokset perusopetuksen päättövaiheessa 2011 [Evaluation of Learning Results in History and Social Studies at the End of Basic Education 2011]

The selection procedure was similar for documents from other Nordic countries. In this dissertation, also two other country cases were used. In Publication II, with my co-authors I examined the Renewal of the Fundamental School Reform in Iceland (2013–2017), and the Renewal of the Knowledge Promotion Reform, Reform in Norway (2016–2020). These cases have been explained in Chapter 3. The list of policy documents analysed in Publication II for the case of Iceland are in Appendix 3 and for the case of Norway, in Appendix 2.

6.3 Bibliometric and network analysis of in-text references

Expanding upon Cairney's characterization of evidence as an "assertion backed by information" (Cairney, 2016, p. 3), in POLNET the references within policy documents were viewed as validating evidence and conferring a sense of authoritative credibility upon the assertions put forth in the reform proposals

(Steiner-Khamsi, 2022). POLNET's study design was inspired by the research paradigms of social network analysis and the sociology of knowledge (Pizmony-Levy and Baek, 2022). The project investigated the architecture of policy knowledge, exploring the links between policy documents and other knowledge artefacts (Pizmony-Levy and Baek, 2022). In this dissertation, the bibliometric analysis was especially used to "look for global inside the national," as Sassen (2013, p. 34) suggests we do to decode "denationalization of what were historically national conditions." In the analysis for this dissertation, I looked for where exactly in the body of policy documents the global arose within the national reform proposal and global intervention, within the national. Ultimately, the aim was to detect any knowledge "formations that emerge as particular negotiations of global dynamics into national" (Sassen, 2013, p. 34), for which I used both bibliometric statistics and illustrative network figures.

The comparative research design required a thorough and careful coding process. After the key policy documents were identified for analysis, all in-text references and publications in the reference list at the end of each document were coded in all five countries using a joint code protocol developed by the research team at the Teachers College, Columbia University (Sivesind and Karseth, 2022). In Finland, the coding was executed at Tampere University by research assistants Elina Kuparinen and Juho Anturaniemi. Their work was supervised by Jaakko Kauko, the leader of the research team in Finland. The Teachers College research team was overseeing the national coding processes to ensure consistency in coding and the coherence and comparability of the five country-specific databases. All references were entered into an Excel sheet. Each entry had an identification number, the name of the author and the title of the publication, the year of publication, and the name of the publisher. Each entry was also coded according to the type of publication (book, report, government-issued report, journal article, and other), and the location of publication (domestic, Nordic regional, and international).

The data was entered in Finland in two stages: the primary input stage, during which data from the selected sources were coded, and the secondary stage, during which the coded data were cleaned and corrected. Some subsequent data cleaning was completed later when the need for it arose. These changes were, however, minor compared to the second stage, and did not alter the original findings. Nevertheless, in the case of Finland, some clarifications needed to be made, especially when categorizing the documents as "book," "report," "journal article," or "government-issued report." The categorization of document types was problematic for two reasons. First, the National Agency for Education in Finland conducts plenty of scientific research, both on its own and in conjunction with certain Finnish universities, which was then mostly published under the agency's name. At times, this made it difficult to distinguish the level of government

involvement. Second, many Finnish universities have faculty publication series where studies conducted by the members of the faculty are presented, often in book form. Many of these studies are peer-reviewed, making the exact categorization of the publication series difficult, as they are not academic journals in the strictest sense. These issues were solved as follows: any studies published by the National Agency for Education were coded as a "government-issued report," and the publication series was coded as either a "book" or a "report," depending on the form of the publication.

Once all country-specific databases were completely ready, statistics were generated from the Excel for further analysis. The UCINET and NetDraw software programs were used to generate descriptive network figures. These figures and statistics were provided by Chanwoong Baek of the Teachers College, Columbia University research team. In this dissertation the following data sets were used for the statistics and network figures: 1) the domestic, Nordic, and international bibliometric references from the Finnish context (N=677) and network figures based on these references in Publication I; 2) the Nordic bibliometric references from all five Nordic countries (N=255) and network figures based on these references in Publication II. They were used mainly to find out what kind of knowledge and whose expertise was valued in the Finnish reform (Publication I) and was Nordic knowledge valued as opposed to domestic or international knowledge in the five Nordic countries (Publication II). Furthermore, in the first substudy (Publication I) most cited authors, most cited publishers, and the titles of publications by the most cited authors and publishers were analysed. We investigated further the affiliations of the most cited authors at the time of publishing each document that showed up as one of the most cited publications in our data. This was done by listing all their cited publications with years of publication, and finding out where the authors worked at the time of publication. To find this information we used staff profile pages, publications, and newsletters of universities, governmental organizations, and other employers; newspaper articles, and other publications in the same year that mentioned the author's position and organization; and in some cases biographies.

During the first substudy, on the NCC in Finland in 2014, our team also decided to double-check and complement our findings with a content analysis of the ten documents selected for investigation. We inspected the ten core documents, looking for any references to the OECD and PISA that appeared within the text but were not references to actual sources nor included in the reference list. Finally, we examined each of the most cited OECD documents and identified the policy documents in which they were used. Consequently, we then produced a table of OECD references in the ten core policy documents. In the table each OECD document had its original numerical reference code indicating its order in the whole database of 5391 references, the source code indicating in which one of the ten policy documents it

was referenced, and the purpose of the source document. This table is presented in Appendix 4. Analysis of the OECD references was used in Publication I. The analysis of references to OECD or PISA, combined with which policy documents OECD publications were cited, allowed us to see where exactly the global intervention influenced the national. This part of the study shed light on the hierarchy of evidence in legitimizing claims and unveiled the intricate patterns of global dynamics interwoven within the national context, which Sassen (2007) coined as the process of denationalization. These processes were further examined in the interviews with policymakers involved in the reform processes, to which I turn next.

6.4 Expert interviews

Petter and Anton Törnberg (2019, p. 58) have stated that even if computationally oriented approaches like the network figures crafted with NetDraw or UCINET utilized in this study, are "highly useful for identifying the ways that network structure impacts social phenomena," they have a tendency to do this "at the cost of abstracting away the cultural and intersubjective contexts of social relations, systematically disregarding everything that cannot be brought into the network formulation." They suggest complementing network analyses with other methods to add depth to the analysis.

In this study, the bibliometric analysis of references was useful for exploring where the global intervened with the national and created what Sassen (2007, 2013) has called moments of denationalization. The social network analysis of the references further illustrates how national, regional, and global knowledge were interwoven into an assemblage that created the knowledge base and the policy of the recent school reforms in the Nordic countries. Nevertheless, these figures and statistics did not consider the constant state of becoming inherent to space and policy assemblages (Massey, 2005; Savage, 2020). Furthermore, a concrete need to complement these methods arose from the fact that across the national data sets in the POLNET project, regional, Nordic in-text references were absent or at least, there was a considerable shortage of them compared to national and international references. With two of my colleagues, Kirsten Sivesind from the University of Oslo (UiO) and Jón Torfí Jónasson from the University of Iceland (UICE), we decided to dig deeper into the question of Nordic knowledge exchange and cooperation in education policy and politics (see Publication II). We conducted a total of 18 interviews with the members of the key working groups and committees in Finland and Norway and some key ministerial policymakers in Iceland. The interviews in Finland and Norway were conducted in the spring and summer of 2020. Jón Torfí Jónasson (UICE) conducted the interviews in Iceland in December 2019. We used the interviews both to obtain new insights into regional knowledge sources and to

acquire knowledge about Nordic cooperation and knowledge sharing, which cannot be disentangled by bibliometric network or document analysis.

The informants in Finland and Norway were chosen based on being members of the working groups or committees that had drafted either the white papers or the most influential green papers in the reforms we examined in the bibliometric network analysis. In Iceland, the selected informants had been involved in the Icelandic education policy formation processes several times from 2013 to 2017 (Magnúsdóttir and Jónasson, 2022). All informants were hence involved either directly or indirectly in the reforms and in drafting the reform proposals examined in this dissertation. Many of them had a long track record as policy advisers, members of different ministry-appointed expert panels, and/or experts in their specific field, be it policymaking, sciences, stakeholder involvement or politics. Some of them held several positions of trust in politics and policymaking and were involved in other fields of politics and policy in addition to education. The interviews we conducted can thus be perceived as elite interviews, since: 1) they targeted people who were directly involved with the political process (Dexter 2006) and 2) they represent an exclusive group of people that has the power to make decisions that influence the lives of others (Mykkänen, 2001).

Access to elite informants is not always easy (Beamer, 2002; Dexter, 2006; Mykkänen, 2001), and getting an interview can be one of the biggest challenges in elite interviews (Goldstein, 2002). I faced this challenge especially in Finland, as the Covid-19 pandemic affected the availability of informants. Some members of the working groups had extra responsibilities in the national ad hoc body of experts handling the Covid-19 crisis in Finland. In the end, we conducted 18 semi-structured interviews in total, eight in Norway, five in Finland, and five in Iceland. I conducted five interviews in Finland in Finnish and four interviews in Norway in English. The remaining four interviews from Norway were conducted in Norwegian, by Kirsten Sivesind and Bernadette Hörmann of the University of Oslo. The Icelandic interviews were conducted in Icelandic by Jón Torfí Jónasson. All nine interviews I conducted were done through Skype due to Covid-19 restrictions. They were recorded on Skype. Some of the interviews in Norwegian and Icelandic were conducted in person, and they were recorded with single recorders in physical settings. All interviews were transcribed word for word and, when necessary, translated into English by the interviewers.

Previous literature has pointed out that one of the characteristics of elite interviews is the imbalance of power relations, as the interviewees hold a higher societal status than the interviewers (Dexter, 2006; Mykkänen, 2001). Hence, careful preparation is needed for this data production method to succeed (Beamer, 2002; Goldstein, 2002; Mykkänen, 2001), and as both Dexter (2006) and Mykkänen (2001) state, this method is so risky that one should not rely on elite interviews as the only method of data production. Our previous work in the

POLNET project, to scrutinize the knowledge used in the key policy documents behind the reform we analysed, gave us a solid background for the elite interviews. Furthermore, mindful of the risks elite interviews entail, we took time to carefully construct the interview guide for Finland and Norway. The first draft of the interview guide was designed by Kirsten Sivesind (UiO). We then thoroughly discussed the interview guide with the whole research team of the second substudy. The interview guide was slightly modified based on these discussions.

Throughout this dissertation, I encountered a significant portion of academic literature on expert interviews authored by English "native" speakers who conducted qualitative research in English-speaking contexts. Less, yet some, literature was written by researchers who conducted elite interviews in their "native" language and then reported their findings in English (see for instance: Neumann, 2011). However, comparative education research often entails operating in multiple languages, as was the case in this study. In contemporary academia, there is a prevailing implicit agreement to predominantly employ English as the lingua franca for communication (Curry and Lillis, 2017; Hohti and Truman, 2021). English is widely seen as advantageous, serving as a universally accepted medium for the exchange and dissemination of ideas (Curry and Lillis, 2017). Nonetheless, Hohti and Truman (2021) argue that language transcends mere communication; it profoundly influences the distribution of labour, knowledge generation, meaning creation, and career advancement within academia. In our expert interviews, language undoubtedly played a role in shaping the division of labour. While most experts were interviewed in their native language, I interviewed Norwegian speakers in English as I do not speak Norwegian. I interviewed informants whom we knew to be fluent in English but more importantly, the choice was made based on the Norwegian research context. As Norway has a relatively small population, my Norwegian colleagues personally knew many key experts and in POLNET we decided that I would interview informants who had to some extent collaborated with my Norwegian-speaking colleagues or otherwise were their acquaintances.

Recent discussions within bilingual research settings advocate for allowing interviewees to select their preferred language to effectively articulate their thoughts and emotions (Mann, 2011; Rolland, 2023). Rolland (2023) underscores the importance of anticipating and managing language switches during qualitative interviews with multilingual participants. In interviews conducted in English, experts were initially contacted in English without explicit language choice options. However, they were informed of voluntary participation in the consent form, with no consequences for withdrawal (see Appendix 5). As the interviewer, prior to the actual interview, I expressed that I did not speak Norwegian but did understand a closely related language, Swedish, and offered participants the option to switch languages if they lacked a specific word in English. Despite this, all interviewed experts opted to communicate in English throughout the interviews. The potential

language bias resulting from these language choices is explored in Chapter 9.1. This examination acknowledges the implicit expectation of English as the lingua franca in both academia and global expert communication.

Open-ended questions are generally advised in elite interviews as they as elite "prefer to articulate their views, explaining why they think what they think" (Aberbach and Rockman, 2002, p. 674). Our interview guide consists of larger open-ended questions on specific themes, and sub-questions for clarification or to invite the informants to speak about details of a certain theme. The interviews in Iceland were conducted in Icelandic. They followed an interview guide designed by Jón Torfí Jónasson (UICE), as he had conducted interviews before we started to work on the second substudy. In the interviews, the informants from Iceland were asked especially about Nordic cooperation and international cooperation, and the established practices of policy formation (Magnúsdóttir and Jónasson, 2022).

The interviews in Finland and Norway followed the exact same interview guide that was translated into Finnish and Norwegian by me and Kirsten Sivesind. For this dissertation, I used both the English and Finnish interview guides. The interview guide in English can be found in Appendix 6 at the end of this dissertation. The interviews from all three countries were used for Publication II. For Publication III, I used the interviews from Finland (in Finnish), and some of the interviews from Norway (in English and Norwegian), namely the interviews with the members of a specific ad hoc commission with a similar mandate as that of the Finnish working groups. In this dissertation, I focus on the following interview themes:

1. Role and expertise of informants in the working group/committee that led to their participation;
2. Informants' specific areas of interest and emphasized themes in the expert panel's work;
3. Consideration of knowledge sources and evidence by the expert panel, and the decision-making process;
4. Significance of Nordic knowledge and cooperation in the reform process compared to national and international knowledge;
5. Informants' reflections on inspiring meeting places (e.g., seminars, conferences, meetings) during their panel membership.

Our informants had been directly involved in the reform processes we examined. Several of them had been involved in previous reforms as well. Hence, they were able to offer insights into the reform process that we would not have been able to gain through any other method. However, Jerolmack and Khan (2014) warn against what they call attitudinal fallacy. With this, they mean that researchers do not consider that people not only frequently behave in ways that contradict their stated attitudes but also regularly offer imprecise descriptions of their previous actions

(Jerolmack and Khan, 2014). Considering this potential risk of bias, and being aware that in the interviews, our informants shared with us their memories of a policy process that occurred anything up to ten years ago, we decided to call our findings "narratives" in Publication II. Furthermore, the interviews we conducted were processual: the emphasis was on how, who, when, and where, and we explicitly wanted to know about "roads not taken," for instance when asking why Nordic knowledge was not referred to in the policy documents (Tavory, 2020). As will be shown in Publication II and Chapter 7 on results, the Nordic "road not taken" opened a window onto the international arena of policymaking and onto the hierarchization of evidence.

In this dissertation, I do not treat the accounts shared by the informants as absolute, objective truths of what happened or how the policy process factually was. As Dexter (2006) has noted, elite interviews can produce distinct data for delving into the complexities of policymaking and politics. In line with both the policy and research processes as assemblage, I view a research interview as a specific context within which knowledge is co-created by both the interviewee and the interviewer. Drawing from Tavory (2020), I also view the interviews as open contexts: they are irreplaceable windows onto other contexts, in this dissertation the context of reform processes under scrutiny. Tavory responds to the critique that talk is cheap (Jerolmack and Khan, 2014) by stating that

> precisely because they elicit "talk," interviews allow us to glimpse what is perhaps the most human of characteristics: our ability to tell narratives about who we are and what we do. Representations, fantasies, metaphors, and narratives are not "noise" – they are a crucial part of the social world that people co-construct (Tavory, 2020, p. 456).

The narratives told by the political elite have a particular position in co-constructed social worlds. Ball (2013) contends that experts and their knowledge hold a crucial position in shaping educational discourses, which determine and govern how individuals should behave and perceive their identities. Their narratives and what Tavory (2020) calls "landscapes of meaning" have political weight and consequences for how we imagine the future of education systems and the possibilities and constraints of education in our societies. They have the power to narrate imaginaries (Popkewitz, 2000, 2007) on both the national and the global scale in education policy and to make reform ideas appear logical and incontestable (Ball, 2017).

Moreover, the interviews served as a valuable tool to advance and complement this investigation into the intricate interplay between the global and national realms. Particularly noteworthy was the pursuit of the proposal made by Sassen (2007) to delve into how national actors do global policy within their own borders. Building upon this foundation, publications II and III extended Sassen's concept by

not only scrutinizing the global undertakings of national actors within the national sphere, but also by also exploring their involvement in doing national and regional policy within the global sphere. The third substudy took a comprehensive approach by delving into the social interactions and gathering spots of these national actors, unravelling their roles and positions in the intricate tapestry of policy translation. The analysis of interviews in this substudy stemmed from the dialogical thematization in Leena Koski (2011) and Jackson and Massei (2012) on thinking with theory. Within the framework of Publication III, I began to develop an innovative approach: an experimental exploration of data interpretation through the lenses of spatiality and assemblage. This spatial and assemblage reading is elaborated upon in the subsequent discussion.

6.5 Reading findings through spatiality and assemblages

Inspired by Sassen (2013, 2007), the central pillar of this dissertation was reading the research findings through the lenses of assemblages and spatiality. The theoretical foundation was originally the emergent and relational concept of space, drawn mainly from educational and social sciences (Larsen and Beech, 2014; Massey, 2005; Peck and Theodore, 2015; Sassen, 2007). Based on these theoretical starting points my reading was guided by four main approaches to space, place, and globalization:

1. Space as relational and social (Larsen and Beech, 2014; Massey, 2005);
2. Place as a constellation of trajectories of people thrown together in it, within and as a result of existing global power geometries (Massey, 2005, 2007);
3. The global emerging within national and vice versa (Massey, 2005; Sassen, 2013, 2007), through moments of denationalization within what traditionally has been viewed as the national policy sphere (Sassen, 2013, 2007).

As my theoretical understanding grew, I gained a deeper understanding of the connections between these notions of space, globalization, and policy formation, and of policy as assemblage thinking. Even if assemblage theory and methodology were not yet part of the three substudies, the assemblage view was essential for organizing my thoughts and deepening my understanding of the research findings from publications I–III when writing this summary. Baker and McGuirk (2017, p. 428) eloquently express the connection between spatiality and assemblages by stating that “assemblages consist of and create spatialities.” They claim that an assemblage is realized through ongoing processes of deterritorialization and reterritorialization, and as such, any assemblages are continually in the process of being made and remade (Baker and McGuirk, 2017, p. 428), which is line with

Deleuze and Guattari (1987) in their theory of assemblages as a working arrangement in a constant process of becoming. Baker and McGuirk (2017, p.430) suggest three practices for studying policymaking as assemblage, two of which I use here: 1) tracing sites and situations; 2) revealing labours of assembling.

In the spatial reading here, to trace sites and situations, I pay special attention to the selection of evidence for proposed school reform (what was valued and why) and the sites of social interaction and knowledge exchange the policymakers considered to have been influential in the deliberation process. I combine this with what Sassen (2013, p. 32) has called decoding "conditions and dynamics that are likely to be engaged by the global and often are the global as it functions inside the national."

Revealing labours of assembling within the national, regional, and global policy sphere, and the decoding the global functioning inside the national in the bibliometric was executed through:

1. conducting extensive bibliometric analysis of policy text references to place of publication of the most cited authors and publishers;
2. analysis of policy text references to knowledge produced by international organizations with no reference to an actual publication;
3. analysis of the affiliations of the most cited authors;
4. detecting where exactly OECD publications were used as references.

For this purpose, the bibliometric analysis was complemented with the information obtained through elite interviews about how what counts as evidence was decided and why certain types of knowledge were eventually included as evidence in the actual reform proposal.

Inspired by Massey (2007, 2005) in her conceptualization of space and place, and Theodore and Peck (2015) in their theory of fast policy worlds, in this reading I interpreted the sites and situations as moments of social encounter, often specifically set up for policy cooperation. In the spatial reading, I understood places not as bound to exact geographical locations, but as inherently social, especially meeting places of actors that are permeated by global power geometry and characterized by throwntogetherness (e.g., meetings organized by the EU, the OECD, or the Nordic Council). These sites are not pinned to a specific geographic location but fulfil the characteristics of a place when we open the concept up to embrace relationality, throwntogetherness and social dimensions. Reading the meetings organized for instance by the OECD as places, instead of limiting our analysis to nation-states as finite vessels of culture and history and as containers, "representing a unified spatio-temporality" (Sassen, 2002, p. 260), we consider places as open and dynamic.

Furthermore, inspired by new materialist methodology, I read the social interactions in specific places, and the choice of including certain knowledge as evidence in the policy documents, as events in a continuous flow of assembling, reassembling, and disassembling (Fox and Allerd, 2017). This view attends to the processuality of policy formation, and sheds light on the labour and efforts behind the policy assemblage (Baker and McGuirk, 2017); here, the policy of school reforms in the Nordic countries. In the comparative research design, I did not focus on detecting similarities or differences, nor on ranking the policy solutions in an imagined scale of best practices and what works best. Instead, my focus was on the construction of policy Context and on how certain policy solutions are made to sound logical, obvious, and commonsense (Ball, 2017), in the transnational assemblages of people, places, policies and knowledge.

Finally, I examined these assemblages in the light of what Deleuze and Guattari (1983, 1987) have considered essential in exploring social organization: how are assemblages arranged and held together? As I reached conclusions in my spatial and assemblage reading of the findings from publications I–III, I explored how the concept of desire, which Buchanan (2020, 2015) has underscored as central to Deleuze and Guattari's assemblage theory, could be applied within the context of this research. Additionally, I touched upon the dynamics of multisited power within the policy assemblages and the technologies of de- and reterritorialization in the knowledge and expertise hierarchies in Nordic education reforms.

6.6 Ethical considerations, research integrity, and GDPR

Interviews conducted in Finland and Norway adhered to the ethical and integrity guidelines set by the Finnish National Board for Research Integrity (TENK) and the National Committee for Research Ethics in the Social Sciences and the Humanities of Norway (NESH). In Iceland, interviews followed the research ethics guidelines of the University of Iceland. All interviews respected the privacy rules outlined in the EU General Data Protection Regulation 2016/679 (GDPR). Kirsten Sivesind, the Principal Investigator of the project, played a central role in ensuring that the research interview plan for Finland and Norway received proper evaluation and approval. The plan was evaluated and approved by the Norwegian Centre for Research Data (NSD), which assessed that the research project adhered to data protection legislation and met all the required ethical guidelines.

Before collecting interview data, informed consent was sought and received. This ensured that participants understood their rights. All participants were provided with the consent form to review before the interviews. This was done through secure File Sender programmes to ensure confidentiality. The participants were informed that their participation was voluntary and that they could choose to withdraw from the study at any time without facing any negative consequences.

Participants were also informed about how and for how long their data would be processed and stored, and how their anonymity would be protected when citing the interviews in scientific publications. Clear explanations were given about how data would be handled and kept secure. The consent form can be found in Appendix 5.

A key priority throughout this dissertation process and within POLNET was to make sure that the identities of the participants were kept confidential during the research process and when sharing the research results. All interviews were anonymized, and the personal information was kept separate from the interview transcripts. A separate coding system was created to connect the position and organization of the informants with the anonymized interview transcripts, as this connection was vital for precise and correct analysis of our findings. In Publication II, interviews are referred to with the general professional field of the informant and their respective country. In Publication III, interviews are referred to with a code consisting of a country code (FI=Finland, NO=Norway) and number. The gender of the informants is protected by referring to them with "the informant" or "they/them." In line with the GDPR 2016/679, all personal data will be deleted by the end of 2025.

An overarching commitment to research integrity was sustained throughout this study. All co-authors participated in the planning and writing process at least to some degree. Within the resultant triad of publications in this dissertation, as the primary author, I played a central role in the research design, research process, and elucidating the outcomes. Moreover, a parallel thread of research integrity was woven through the publications' accessibility. All articles were proactively disseminated through an open-access framework, underscoring the dedication to transparency and knowledge sharing, as encouraged both by TENK (2023) and NESH (2022).

7 Results of the three substudies

This research was guided by three questions. Each substudy answered one of the three questions. As explained in Chapter 6, my journey started with scrutinizing the knowledge and expertise used in the National Core Curriculum Reform in Finland in 2014. This first study sparked more questions about the role and value of Nordic cooperation and knowledge in education policy processes and the networks of nationally appointed experts doing policy in international meeting places. These questions led to substudy II and III. I will now present the findings for each research question that emerged during this research journey.

7.1 Knowledge and expertise valued in the National Core Curriculum Reform, 2014

The first research question of this dissertation was: What kind of knowledge and expertise was valued in the National Core Curriculum Reform in Finland in 2014? Publication I, "Evidence and Expert Power in Finnish Education Policy Making: The National Core Curriculum Reforms," focused on this question. It was written together with Jaakko Kauko (Tampere University), Juho Anturaniemi (Tampere University), and Íris Santos (Tampere University/University of Lisbon).

In this substudy, we set out to explore how evidence was used in Finland's 2014 reform of the NCC and whose evidence and expertise were most highly valued in this process. Our team chose to focus on a very specific but essential part of this reform, the renewal of the national objectives and the distribution of lesson hours. The actual policy paper, "Future Basic Education" (2012), was produced by a ministry-appointed working group and it was equivalent to a white paper in the Finnish policymaking system. In this white paper, the general national objectives for the NCC were formulated, the proposal for the renewed distribution of lesson hours presented, and the necessary decree changes suggested for the Government Decree on the National Objectives for Education Referred to in the Basic Education Act and in the Distribution of Lesson Hours in Basic Education (Valtioneuvoston asetus 422/2012). Hence, the white paper set a framework within which the context of the NCC was constructed.

The main method used in this substudy was bibliometric and text-based social network analysis of 677 bibliometric references in ten key policy documents. This

methodological choice was inspired by the definition of evidence as "an argument or assertion backed by information." (Cairney 2016, p. 3). It was further supported by Gita Steiner-Khamsi's (2022, p. 35) claim that examining bibliometric references is crucial since references in policy documents are used to "provide legitimacy to the evidence which the author has provided in the document." As the substudy proceeded, the initial methods were complemented with an analysis of the titles of the most cited publications, content analysis, analysis of the use of OECD references, and analysis of the affiliations of the most cited authors.

The results of this substudy reveal, first, that the knowledge and information utilized as evidence in the policy documents for the renewal of general objectives and distribution of lesson hours was predominantly domestic, governmental, and self-referential. Second, it was largely based on evaluations of learning results and student assessments. In the ten key policy documents we analysed, 76% of the references used were published in Finland. Despite Finland being a Nordic country and all the established forms of cooperation that exist within the Nordic region, the proportion of regional, Nordic references used in the key policy documents was extremely low, less than 2%. Evidence categorized as international was used more, over 22%, but even this was less than could be expected based on previous research on transnational governance and the influence international organizations exercise in national decision-making.

Furthermore, the bibliometric network analysis revealed a strong tendency to self-referentiality, meaning the expert panels that were appointed by the Ministry of Education and Culture referred mainly to publications of either that same ministry, or the National Agency for Education. These two organizations were in general the main actors of the curriculum reform process. The Finnish government is responsible for the general objectives and the responsibility for the content of the NCC is delegated to the National Agency for Education. Two subsequent working groups worked on the proposal for the renewal of the national objectives and the distribution of lesson hours. They were government-appointed and the second one that finally drafted the actual reform proposal only had members from the Ministry of Education and Culture.

The evidence used in this reform was predominantly knowledge provided by the Ministry of Education and Culture and the National Agency for Education. Of the 395 publications on the list of the most cited publishers, 43% were published by the National Agency of Education, and 14.5% were published by the Ministry of Education and Culture. As we then scrutinized the list of most cited authors and did research on their employers and affiliations at the time their book, article or report was published, we discovered that most of them were either employees of the National Agency for Education or affiliated either to the National Agency or the Ministry of Education and Culture. These findings strengthened the argument of self-referentiality.

The top ten most cited publishers only included two universities: the University of Jyväskylä ranked third and the University of Helsinki fourth. As Ydesen, Kauko, and Magnúsdóttir (2022) explain, these two universities hold a special position in Finnish education policymaking and politics. The Finnish Institute of Educational Research at the University of Jyväskylä and the Centre for Educational Research at the University of Helsinki have been in turn contracted by the Ministry of Education and Culture to implement PISA. The Finnish Institute of Educational Research has also been responsible for the teaching and learning international survey (TALIS). These two research centres are without doubt the main hubs for OECD data expertise in Finland. These findings imply that data and knowledge of evaluation and assessment were valued more in the reform process than academic or scientific knowledge, but also imply that a close relationship with government organizations may be a factor that favours academics who are well known at the Ministry of Education and Culture due their work on PISA and TALIS.

This leads us to the expertise that was valued in the reform. In this reform, it largely appeared to be expertise in evaluation and assessment. The fact that only two universities made it to the list of most cited publishers and that they are the universities with research centres contracted to implement PISA, is unlikely to be a coincidence. Furthermore, most of the most cited authors writing publications in Finnish on either national assessments and evaluations or PISA results. Our content analysis revealed that OECD data and PISA results were referred to in the documents, but often without an actual reference to an OECD publication. Some of the Finnish-language publications dealt with PISA results even if the publications were published in Finland, and hence domestically. A specific form of expertise in this reform appeared to be the ability to interpret and explicate the results of the OECD's PISA evaluations to apply to the national context and reform ideas.

Interestingly, the first substudy illuminates the entangled nature of today's space of education policymaking in which national and international, or local and global, are intertwined. At first glance, the knowledge used as evidence in the curriculum reform appeared to be predominantly domestic and the reform process, state-centred. For instance, only 3% of the publications of the top ten most cited publishers were published by the OECD, which was the only international organization that made it to the top ten publishers. However, further examination of where exactly the OECD references were used revealed that they were used in the white paper or first green paper. Both papers contained the actual proposal for the renewal of national objectives and the distribution of lesson hours. In other words, the OECD documents were cited considerably less than the domestic ones, but they carried considerable weight in terms of the actual policy design. One of the conclusions of this substudy is that international organizations may derive their power from their ability to produce large bodies of often comparative and quantitative data. Yet, the power to select, interpret, and possibly modify this data

to fit the national contexts and reform is in the hands of national actors and organizations. Any knowledge or data becomes evidence only *after a national policy and/or political narrative is attached to it*.

This substudy suggests that the policy evidence may function both as a legitimation tool for reform and to strengthen the power and prominence of a limited group of experts and expert organizations. The state may officially still lead a reform process and hence, is by no means unimportant. The results of the first substudy indicated that experts who are often nationally appointed draw their expertise from networks based on both local and global knowledge exchange and connections. Hence, much power may be found working in and through the networks of experts, which sparked my interest to examine social encounters and space as the social stretched out (Massey, 1994) in the subsequent substudies.

7.2 The regional Nordic cooperation and knowledge in the school reform processes in Finland, Iceland, and Norway

The second research question of this dissertation was: What was the role of Nordic cooperation and the value given to Nordic knowledge in the recent school reforms in Finland, Iceland, and Norway? Publication II addressed this question, and it was written together with Kirsten Sivesind (UiO) and Jón Torfí Jónasson (UICE). Building upon the findings of the first substudy, this second substudy was prompted by the revelation that despite the ample and established forms of Nordic cooperation and shared language group, regional Nordic knowledge was notably lacking. To address this gap, we conducted a bibliometric analysis focusing on the 225 Nordic references cited in all five Nordic school reforms utilized as exemplars in POLNET. Utilizing bibliometric data, we identified the most frequently cited Nordic publications and explored references made in the five reform cases to these most cited publications. Nordic cooperation is known to be active, institutionalized, and frequent in the Nordic countries, which in this substudy was further demonstrated by creating a systematic table of the number of meetings under the auspices of the Nordic Council and the Nordic Council of Ministers. Yet in all five national reforms, only 2–7% of references were to Nordic documents.

As the bibliometric analysis left us puzzled, we decided to complement it with thematic, qualitative interviews with the experts involved in the reform work in Finland, Iceland, and Norway. These three were chosen since they are the youngest nation-states among the Nordic countries (Elgenius, 2011). We conducted 18 interviews with experts who had been directly involved in the reform processes. The interview results revealed that despite our findings from the bibliometric and social network analysis indicating otherwise, during these reforms Nordic cooperation and communication with the Nordic colleagues was considered significant, and the

ongoing reforms and developments in other Nordic countries were carefully observed. The drafting of a reform proposal or a policy recommendation always started from looking at the solutions reached in other Nordic countries. Nordic policy cooperation was described as a space of oneness, characterized by a feeling of belonging and like-mindedness. At the same time, there was a solid awareness of the differences between the five Nordic countries in political systems, traditions, and even the degree of marketization of the education system.

From the interview data, we were able to identify four main narratives to explain the absence of Nordic references in the key policy documents. These four narratives also illuminate the hierarchy and legitimation function of evidence, and the role of the Nordic policy space in policy transfer and translation. These narratives were: 1) Nordic cooperation is not well documented and does not produce data that lends itself to easily to reference; 2) Legitimation function and hierarchization of evidence play roles when choosing evidence to reference in written documents; 3) Nordic cooperation is such an implicit part of policy cooperation that it does not need specific mentioning; 4) In the curriculum reforms, national orientation and political dynamics still play the greatest role.

The first narrative we identified for the absence of Nordic references was that Nordic cooperation is not well documented and does not produce data that lends itself easily to reference. The second was that the legitimation function and hierarchization of evidence play a role when choosing evidence to be referenced in written documents. Together these two narratives underline the power the international organizations hold through producing a massive amount of comparative, indicator-based data to which any national narrative is easy to attach. This power to produce knowledge was discussed in substudy I, in the context of Finnish decision-making. The findings of substudy II further strengthen the argument that the power of international organizations in the global policy space stems from the ability to produce large, quantitative data that is circulated and applied at the national level to fit the context, and that lends itself easily to references in policy documents. In the interviews, however, it was evident that this data is used selectively, mainly when it fits the argument that national actors want to push forward. The data produced by, for instance, the OECD has a higher status than Nordic or national evidence to legitimize national reforms and policy recommendations, particularly if the recommendations or reforms are contested or unpopular.

The third narrative that emerged in the interviews was that the Nordic space was this other that was always there but as such an implicit part of the policy cooperation of national actors that it did not need separate mentioning. Yet, the informants reported that reform proposals were discussed in Nordic meetings, and during the reform processes it was customary to conduct field trips to other Nordic countries to hear how they have tackled issues. Specific meetings the informants

mentioned were the annual meetings of the directors of the national education agencies, meetings of Nordic curriculum specialists once or twice a year, and cooperation within the Nordic Council of Ministers. The fourth narrative we identified from the interviews to explain the missing Nordic references in our data, was the national character of comprehensive, basic education and national curricula. All informants brought up in one form or another that in the curriculum reforms, the national orientation and national dynamics in education politics and policymaking play the greatest role. This may explain the self-referentiality and the dominance of domestic references in the policy documents that we found in substudy I.

Again, the findings of the second substudy reveal that the national, regional Nordic, and global are not layered, but rather reveal their interconnectedness. The conduct and practices of the Nordic actors in the international policy settings like the OECD meetings, illustrate the intertwined and entangled character of today's education policymaking and politics. This substudy asserts that the global dynamics of education space are not just a matter of international organizations exercising their influence on the national level, with the regional level acting possibly as a buffer of a space of mediation or translation in between. Instead, the findings of this substudy paint a picture of an active Nordic education policy space that stretches out through connections of national actors and exercises its influence as one entity in the international decisions and recommendations of the OECD and other organizations.

7.3 Position of national experts and the role of social encounters and international meeting places in the policy translation process

The third research question was: How did the expert panels of Finnish and Norwegian curriculum reform talk about the role of meeting places and their position in the policy translation process? The question was explored in the third substudy, presented in Publication III, where I served as the sole author. This study delved into the social dimensions of the policy space, as articulated by Massey (2005, 1994), and the position of national actors as mediators between the global and the national in the reform process. The primary focus was on the position of national experts as policy translators within three expert panels in Norway and Finland, bridging the national and international policy spheres, as well as navigating between various subsystems within their national policy contexts. Thus, this substudy focused on the interplay of the national and international through the position of experts as policy translators. The investigation drew upon qualitative data from 11 expert interviews in Finland (N=5) and Norway (N=6), with members of these expert panels, each tasked with the mandate of proposing renewed

objectives for the national curriculum reform in comprehensive basic education. While the work of these expert panels, referred to as working groups in Finland and a commission in Norway, may seem incremental, it influenced the direction and content of their respective reforms significantly. This strengthens further the argument put forth by Baek and others (2018) that there is much to be learnt from incremental reforms.

The results of this substudy reveal that much undocumented information and knowledge is exchanged in social encounters of expert networks that stretch beyond the borders of the nation-state. The substudy identifies three positions the expert panel members held in the policy translation process. All three positions have both temporal and spatial elements. These positions are that of a translator: 1) between present and future; 2) between subsystems; and 3) between national and international policy spaces. The first position stresses the temporal aspect of reform work and the other two are more characterized by spatiality. However, as Massey claims, time and space are intertwined. Hence all these positions have both spatial and temporal elements.

These three translator positions illuminate the interplay of local and global education policy and politics and show that ideas are indeed not produced in one place and then just transferred to another. Internationally connected national experts do play a significant role in constructing policy knowledge and reform ideas in the first place, but also in transmitting and translating this knowledge and these ideas from the international policy space to the national context, and vice versa. In addition to acting as translators between the global policy space and the local context, the interviewed experts also saw a very important part of their role as translating the policy knowledge and reform ideas into an understandable form to subsystems other than their own. This meant for instance that academics understood they needed to be able to explain academic knowledge to politicians, and the politicians were aware that they needed to explicate their ideas and the knowledge used to the public. In addition, most informants took their responsibility for the future very seriously. Several informants elaborated on how difficult it felt to think today what would be needed for the future, yet the curriculum was supposed to be built so that school education would provide the skills and competencies needed by the nation-state in the future.

These three positions reflect the complexity of the current decision-making environment that may be rooted in the national but is increasingly influenced by transnational cooperation and the dominant global policy discourses and reform ideas promoted by international organizations, international power structures, and transnational social encounters. Choosing the evidence on which to base policy is a constant compromise between the different subsystems involved in the policymaking process, and a matter of translating and modifying international evidence so that it serves and fits the national context. In this process, evidence is

contested even if all the members share a common understanding of the mandate and goals of a specific expert panel. What is considered evidence varies between the subsystems, and the knowledge needs to be communicated understandably to all interest groups involved in the policymaking process, even sometimes after a consensus is reached.

Both the civil servants and the academics on the expert panels were extremely connected globally. A large part of their expertise stemmed from their international networks, and it could not be traced back to exact knowledge sources. Many informants found it challenging to explain exactly where they draw from in their work as panel members, for inspirational knowledge exchange also takes place in informal settings. The informants were able to name specific places in which they had gained and exchanged policy knowledge and inspiration, or fast policy worlds that compressed time and space in education policymaking. These were meetings, seminars, and specific policy projects of international organizations like the OECD and the EU. In addition to the tacit knowledge gained through long experience and social encounters in international places of policymaking, the experts brought to the table their personal histories and individual trajectories, and some reported policy ideas could emerge from discussions with friends or when meeting acquaintances on the street, especially since all of the national contexts were built around rather small circles of policymakers and societal actors, in countries with a relatively small population.

The findings of this substudy further highlight the relationality and networked nature of today's policy space. This substudy demonstrates with empirical data how space indeed is constructed and co-created through the actors and their networks. But expertise is in a sense produced outside the expert and through the transnational networks; a big part of their expert status is enforced not by what they know but "doubly externally" (Eyal, 2019). This means that experts gain access to places through their nationally appointed and established expert status in a specific field. But this status is further reinforced through the international encounters and experiences they gain when representing their nation-state. In the data of this substudy, this could be detected in how many informants not only had national responsibilities as expert panel members but also held (or had held) international positions of trust in organizations like the EU or the OECD. In these positions of trust, they were able to influence decision-making at the transnational level and bring in vantage points that were of national importance. The networks of the national experts appeared to form a transnational policy space, within which the clear and layered distinctions to the national, regional, and global dissolve and intertwine.

8 Discussion

This dissertation's central task was to investigate the dynamics of policy assemblages in Nordic school reforms. It aimed to elucidate the emergence of globalization and transnational policy spaces within moments of denationalization and through national actors doing global policy (Sassen, 2007), navigating the complex interplay of the national, Nordic, and global spheres. Reading the findings of the substudies in terms of space as socially constructed and reforms as policy assemblages, I identified three main themes that this study contributes to our understanding of globalization in education. In the following sections, I will delve into each of these themes and discuss them in the light of previous work in globalization of education, before moving to reflections on this journey and reaching conclusions.

8.1 The global emerging through the national and the hierarchy of knowledge in evidence-based policymaking

The first theme of the assembled globalization of education identified in this study was how globalization emerges through the national (Sassen, 2013), and in the case of this study, the regional Nordic as well. The spatial and assembled reading on globalization that seeks the moments of denationalization within the global (Sassen, 2007) and focuses on the labours of assembling in the policy process (Baker and McGuirk, 2017), was especially useful when rereading the results of Publication I. This substudy delved into whose knowledge and expertise was used in the NCC 2014 in Finland.

Although the domestic references appeared first as the dominant form of evidence in the NCC, a closer look revealed a more complex reality. Previous research has stated that the power of the OECD derives especially from their ability to produce large, comparative data sets that appeal to national decision-makers as they work well as evidence, especially in the case of unpopular reforms (Steiner-Khamsi, 2012A). The findings of this study align with previous research, suggesting that within the evidence-based paradigm, moments of uncertainty and the need for legitimation create opportunities for knowledge deemed high in the hierarchy of evidence, appearing objective and scientific, to integrate into the assemblage. This

includes not only the knowledge artefacts themselves but also the organizations producing them and their political agendas. The process of assembling enabled by the hierarchization of knowledge in evidence policymaking, and global interventions in the national process, were visible especially at the final stages of Finland's NCC reform. The OECD knowledge was used in the policy texts that contained the actual design for the curriculum reform, indicating that the influence of the OECD became pronounced during this critical stage of the policy process and knowledge produced by it was used as evidence, particularly in presenting the final reform proposal to the parliament.

The findings presented in the second substudy (Publication II) further illuminate this process of assembling and global emerging within the national and regional through the existing hierarchization of evidence. Scholars such as Stone (2016) and Espeland (2015) have both emphasized the allure of quantitative data, owing to its adaptability to various political narratives. In education policymaking and politics, this allure is exemplified in the popularity of the comparative and quantitative data produced by the OECD, which hides the OECD's political agenda behind apparently objective and scientific numbers. The allure of numbers was clearly visible in the interviews with experts involved in the school reforms of Finland, Iceland, and Norway presented in Publication II. Notably, the Nordic experts, as discussed in the second substudy, underscored the efficacy of numeric data as evidence and stated that Nordic cooperation lacked well documented and easily referenceable data. Interviews within the Nordic context of this study further underscore the hierarchical structure of evidence, aligning with Steiner-Khamsi's (2022) observations. Nordic informants explained the absence of Nordic evidence in national documents by legitimation processes within which international evidence scores higher than regional or national knowledge (Publication II).

One conclusion from the first substudy (Publication I) is that international organizations derive power from producing extensive bodies of comparative and quantitative data, yet the translation and adaptation of this data to fit national contexts rests in the hands of national actors and organizations. The first substudy emphasizes that knowledge or data only transforms into evidence when attached to a national policy or political narrative. The findings of this study highlight the hierarchical nature of evidence, which frequently prioritizes international knowledge over regional or national inputs. They also illustrate how the global dimension emerges within the national context especially, facilitated by Evidence-Based Policy Making (EBPM) paradigms. Additionally, the findings reveal how national actors navigate the intricate landscapes of education policymaking, which encompass both national and global dimensions simultaneously.

8.2 Tracing sites and situations: Social encounters, translator positions and the entangled national/Nordic/global policy policy space

This dissertation has shown that nationally appointed experts play a crucial role as mediators and translators (Publication I and III). They hold essential positions in the policy assemblage of national, regional, and international policy evidence and interests, which were further explored in Publication III. This third substudy delved into international meeting places (seminars, workshops, meetings) organized by the EU and the OECD. These places appeared to be what Peck and Theodore (2015) have called compressed policymaking moments, and the national policymakers are intensely aware of what can be achieved through such moments through coalitions. In terms of assemblage methodology suggested by Baker and McGuirk (2017), examining such places can be viewed as tracing sites and situations. The first two substudies hinted at the essential role of social connections and encounters among national policymakers in specific meeting places, drawing attention to the significance of national policymakers in the creation and diffusion of policy ideas across national, regional, and international arenas. This notion was further explored in detail in the third substudy, uncovering the non-linear and non-rational nature of evidence-based policymaking, aligning with insights from Cairney (2016) and Cairney and Olivier (2017). The three substudies together draw a picture of policy space in which national, regional, and global intertwine and form an entangled assemblage of actors, knowledge artefacts, and sites of assembling. This contests the layered and separate image of global policy space, in which global actors and organizations endorse their agendas on the regional and national levels. How the Nordic policymakers describe the conduct and coalition building in the international arenas of policy cooperation revealed how the regional level is not just a buffer but in a sense a bulldozer to actively promote national ideas and agendas under the Nordic flag.

Indeed, Sassen (2007) has astutely noted that what we perceive as global influences often stem from the actions of national actors engaging in global policy initiatives, or, as she formulates, doing global policy. Building on a similar notion, Beech and Artopoulos (2016) have emphasized that global policy discourses endorsed by international organizations are propelled by nationally-based actors who not only promote and disseminate these ideas but also participate in their initial creation. The findings of second substudy on the role of Nordic policy cooperation reveal that national actors strategically channel their ideas and interests through Nordic collaboration and coalition into the global policy space (Publication II). The first two substudies hinted at the essential role of social connections and encounters among national policymakers in specific meeting places, drawing attention to the significance of national policymakers in the

creation and diffusion of policy ideas across national, regional, and international arenas.

The third substudy (Publication III) identifies the national experts taking three translator positions; their translation between national and international policy spaces is especially relevant for this dissertation. Nationally appointed experts act as mediators in the transnational policy landscape, and policy knowledge functions as a binding agent or transmitter through which various human and non-human actors align themselves with the policy landscape and attach themselves to the transnational policy assemblage.

Drawing on the concept of space as relational (Larsen and Beech, 2014), the roles of national actors (Beech and Artopoulos, 2016), and the notion of space as "the social stretched out" (Massey, 1994, p. 2), this dissertation illustrates how space is actively shaped and co-constructed by the actions and networks of various actors. The creation, exchange, and translation of policy knowledge play a central role in the process of someone being viewed as an expert. As Eyal (2019) has pointed out, expertise is a doubly external process and historically specific; it is also spatially constructed in different places where individual and collective trajectories collide (Massey, 2005).Hence, this study reveals that expertise is not solely a product of individual knowledge but is rather produced externally through transnational networks. The expert's status is not only derived from national appointments and established expertise within a specific field but is also significantly bolstered through international engagements. In these international roles, experts were able to influence decision-making at the transnational level, bringing in perspectives crucial to their respective nation-states. The networks of these national experts effectively created a transnational policy space, blurring and intertwining the once-clear distinctions between national, regional, and global dimensions.

The power of the unelected (Vibert, 2007) and the central role of experts in the current era of EBPM (Christensen et al., 2022) undeniably manifest in the findings of the third substudy. However, the analysis of experts' power in political decision-making is complicated by the networked nature of governance in today's world. Knowledge and ideas are exchanged through global, regional, and national networks of experts, intertwining in a way that not only makes it challenging for both researchers and experts to trace the origins of their inspiration for reform. As a constantly emergent and fluid entity, the policy space woven together in the assemblages of experts and knowledge, entangled within the realms of national, regional, and global, is not easy for either researchers or researched to comprehend fully.

The findings of this dissertation on evidence utilization suggest a dual role for policy evidence – not just as a tool for legitimizing reforms but also as a means of reinforcing the influence of a select group of experts and organizations. While the state officially leads reforms, substantial influence lies within the intricate networks

of experts. These experts, often appointed nationally, draw expertise from networks grounded in local knowledge exchange and connections. In the globalized landscape, these networks defy a singular origin, exerting influence within a policy space characterized by a complex web of connections spanning national to international spheres, and vice versa. This has consequences for education policymaking and politics.

The research design of this dissertation project stemmed from the commonalities and intertwined history, languages, and culture of the five Nordic countries, and was inspired by the expectation that neighbouring countries can be receptive to similar policy solutions (Dolowitz, 2018). Yet all along I kept in mind that the Nordic countries, despite of often being seen as a unified cultural and political entity, all have their own specific national context and contextual particularities. Within the scope of this research, it was not possible to dig deeper into these contextual particularities. In the three substudies this dissertation consists of, I discovered similar patterns of preference for quantitative and international knowledge as evidence, hierarchization of knowledge, meaning allocated to the meeting places and social encounters, and positions of nationally appointed experts as translators, across all three country cases. What did emerge when unravelling the entangled space of the national, the regional, and the global, was the power of numbers and the hierarchy of evidence that allows specific types of knowledge to attach easily to assemblages of national policy texts and pave the way for the international actors producing such information, to exert their influence on the content of national reforms. In this way, international actors shape the future contexts within which the national and localized reforms are enacted.

8.3 Evidence, expert power, and the policy reforms as an assemblage

Prince (2010, p.173) has claimed that implemented policies are assemblages of texts, actors, agencies, institutions, and networks. In addition to local contexts, they are shaped by complex spatially stretched relations that are driven by globalization but also constitute it (Prince, 2010, p.173). This research has demonstrated that much of these spatial relations in education policy are sustained through the production and exchange of knowledge that works well as a legitimation tool and enables reform proposals to be argued as evidence-based. The attraction of indicators and comparative rankings lies in their adaptability to any context or narrative and in promoting simple solutions that reduce complexity (Espeland, 2015; Stone 2016). But they are also very effective persuasion tools through which soft power operates and transnational policy spaces are constructed in the era of governing by numbers and comparison (Lawn, 2006; Lawn and Grek, 2012). Shore

and Wright (2015, p. 27) have astutely formulated the audits and rankings as a type of power that "rely on our complicity and agency to be effective" and continue:

> Rankings and measures may appear as external, constraining and oppressive, but they are also empowering and self-affirming, or at least for some people. Their construction of easy-to-read, decontextualized numbers, however faulty, also makes them popular and a useful tool for management and governance. These factors may explain why so many people have embraced audit, and also why others, more critical of its rationality and ethics, struggle to find ways to contest processes of governing by numbers (Shore and Wright, 2015, p.27).

In this dissertation, I have proposed a spatial and assemblage reading of globalization emerging within national and regional contexts (Sassen, 2007), tracing the situations and sites of policy exchange as events of assembling (Baker and McGuirk, 2017), combining this with an understanding of space as inherently social and places as a constellation of trajectories (Massey, 2005), and focusing on the labours of assembling in a policy process (Baker and McGuirk, 2017). The spatial reading of the findings in the substudies demonstrates how power in today's education policymaking landscape is multisited, as Savage (2020) has emphasized to be the case in policy assemblages. Although power may still appear to be exercised through a main hub, the nation-state, it does not have one governing centre. Instead, power is exercised within networks of often nationally pointed actors and through policy knowledge that is often produced in global settings, and spun through national narratives before it becomes actual evidence in local policy reforms.

Mapping the actors and identifying the networks within and through which power is exercised in education policymaking and politics, and noting the events of assembling, is an important endeavour, should we as researchers wish to exercise any kind of power ourselves. Nevertheless, it may not be quite enough. As Buchanan (2015) has pointed out, the analytical power of assemblage thinking is weakened when it is only used to demonstrate the obvious, that today's policymaking is characterized by complexity and global interconnectedness. The assemblage theory of Deleuze and Guattari (1987) invites us to dig deeper into the forces that draw assemblages together, maintain their existence, and sustain their power. As Thompson and fellow researchers (2022) and Buchanan (2020, 2015) point out, the concept of desire is essential in our quest to understand policy assemblages. It is closely linked to the process of de/reterritorialization. How would these concepts apply to the findings of this study?

First, education reforms are driven by a desire for continuous improvement, a central characteristic of NPM (Ferlie et al., 1996). As explained in Chapter 5.1, NPM paved the way to "what works" discourse and EBPM, which in turn created a demand for empirical knowledge that would lend itself easily to policy evidence (see

Publication II) and created an opening for the OECD to claim territory as the global authority in defining the ideal progress and society (Thompson et al., 2022). Doing well in PISA opens doors to exclusive spaces of policymaking (see Publication III), which is likely to be part of its attraction. Hence, PISA itself acts as a source and fuel of desire in policymaking, and ranking low in PISA is likely to increase the desire to strive for reform and harmonize any reform efforts with those at the "leading fronts of reforms" (Peck and Theodore, 2015, p. 224). As discussed in Chapter 5.4., Thompson and others (2022) have highlighted the importance of PISA as a specific component in the OECD's assemblage. In this framework, PISA emerges as a pivotal mechanism, or using the terminology of assemblage theory, an event, that consolidates the diverse aspirations within the OECD, defines its structure, and aligns its efforts. Desire lies at the core of the OECD's influence – a particular societal vision upheld by member states and reinforced through the organization's initiatives (Thompson et al., 2022, p. 699). However, the expert interviews in this study illustrated how the drive for constant improvement and keeping up with progress sparked the desire for reform. This could particularly be detected in the interviews with experts involved in the NCC reform in Finland, as several of them referred to reactions they had received in the global policy arena when it became known that the NCC was to be renewed. The main reaction from abroad was, "why do you reform something that seems to work so well?" and the Finnish experts answered that the world is changing rapidly and Finland needs to keep up with progress.

Second, the findings of this study demonstrate how regional coalitions can work to strengthen and channel national desires in global settings, to integrate them into the agenda of international organizations like the OECD, and to influence the global harmonization of policy ideas. The interviewed experts in all three countries talked about like-mindedness and family connection between the Nordic countries that did not manifest in identical policy solutions or reform ideas but rather provided an arena to strengthen and finetune national agendas, implying that this testing ground of ideas worked to clarify what kind of material form the policy proposals could take for the desired reform to succeed. The sense of "the Nordic family" made it easy to get other Nordic countries to back up the ideas of one Nordic country in the OECD meetings, an example presented in Publication II.

This suggests that there is still much to be uncovered regarding the role of regional policy space in education policy transfer studies. Sassen (2007) has noted the phenomenon of national actors engaging in global policy, which is explored in this dissertation. The findings here suggest another dimension: the potential for national actors to enact their policies within global settings, seeking to amplify their specific national interests and desires through regional harmonization and support. This dimension underscores the necessity for research that delves into the role of regional policy space beyond the confines of EU, to comprehend the co-creation of

global policy space and the globalization of education policy. In terms of territory as an act (Buchanan, 2020), the coalition-based attempts of the Nordic countries can viewed as such. Using a regional coalition, they destabilize the global agenda just enough to bring change that aligns with the composition of the world they aspire, and deterritorialize the harmonized limits of ideal progress and society within the OECD, then reterritorialize these limits to align with the strategic goals or societal values of one or several Nordic countries.

The third aspect I wish to address regarding desire's role in education policy formation concerns expertise in today's policymaking landscape and the dominance of the evidence-based paradigm. Eyal (2019) argues that expertise is no longer solely an individual trait; rather, it hinges on an individual's ability to navigate the specialized language of expertise within a collective recognition framework that is historically specific. Expertise is constructed within networks, existing in the relationships between experts rather than within individuals, and it is space/time specific. The findings from Publication I highlight that in the Finnish NCC reform, evidence predominantly originated from the National Agency for Education or the Ministry of Education and Culture, with members of the primary working groups also representing these organizations. Similarly, in the interviews from the Norwegian context, informants emphasized the reliance on scientific evidence, with academic community members participating in key ad hoc committees. Naturally, expert panels contribute to the policy process with their professional knowledge and tend to prioritize evidence that constitutes "true" knowledge within their professional circles. They also bring into the policy formulation process their tacit or practical implementation knowledge gained in a specific field, as highlighted by Holst and Molander (2019) and Head (2008). Nevertheless, in terms of policy assemblage, it is imperative to acknowledge that policies do not operate in isolation; rather, they exist within a complex network, interconnecting with and containing components from other assemblages (Deleuze and Guattari, 1987; Thompson et al., 2022). Once knowledge from a specific expert or organization gains status as evidence in one policy document, it tends to be cited in future policies, enhancing both the status of that knowledge and the expert status of the entity that produced it.

Thompson and others (2022) have demonstrated how the OECD acts as a force for breaking down national barriers and bringing countries together through shared beliefs, with PISA playing a central role in shaping the organization's goals and methods and attempting to create and maintain a shared vision among member states. This study demonstrates how national actors serve as translators between entities like the OECD and domestic policymaking, functioning not merely as connectors within an assemblage, but as links between distinct policy spaces and assemblages. Their capacity to do so is imbued with power derived from their expertise in policy knowledge that ranks high in the knowledge hierarchy and works

well as evidence, and the geopolitical positioning of the nation-state or region. In a sense, following the thinking of Shore and Wright (2015), the knowledge/expertise nexus becomes a circle of self-affirmation, in which experts gains their status through mastering audit and ranking knowledge, but also become accomplices of the very same rankings as their expert position depends on feeding the system with the knowledge it needs and prefers to justify its agendas and proposals.

Power in assemblages is polycentric (Savage, 2020) and relationally composed through interactions among different actors (Allen, 2009). By mapping the human and non-human actors in policy assemblages and searching for the labours of assembling in policy processes, including the spaces and places that act as arenas for such labours, we may detect options that are in threat of falling into oblivion in the policy process. Unravelling the labours of assembling (Baker and McGuirk, 2017), the arrangement of diverse components, opens up a space for resistance and change. As Thompson and others (2022) assert, assemblage theory as presented by Deleuze and Guattari can become a powerful tool when trying to make sense of what Law (2004) has called the "mess" that is policy.

To formulate policy problems and propose solutions, policies have to simplify both the spatial and temporal multiplicity of existence, but this is not without consequences. Policies influence our ability to imagine education, its purpose, and its value beyond our present moment. In "Seeing like PISA" (2016) and "Producing Calculable Worlds" (2016) Gorur articulates a profound perspective. She contends that standardized tests, evaluations, and rankings transcend mere representations of existing conditions; they engender novel conditions, constituting productive processes that actively shape the world (Gorur, 2016, 2015, p. 593). In an analogy to the subtle transformations within the forests of Prussia and Saxon, Gorur, (2016) argues that the repercussions of loss on the way often evade our perception until they are irrevocably realized. Viewing space as social and relational, and policies as assemblages, may open up pathways for intervention for the researchers in comparative education and critical policy sociology that is much overdue.

9 Reflections on validity and the research journey

9.1 Validity: shortcomings and solutions

An integral part of any research journey is stumbling into obstacles and detours on the way. Unsolved, these may compromise the validity and reliability of the whole research. My journey has taught me that even when such issues appear to be solved, no research is perfect. To be faithful to assemblage thinking, such perfection is not attainable, nor even the aim. The purpose is to problematize and, rather than introducing workable solutions or finite answers, to draw near to the phenomenon under study, intervene in it, and introduce uncertainty and the unexpected into our knowing (Fox and Allerd, 2017; Savage, 2020). The shortcomings and uncertainties in this research emerged in three stages of the journey: 1) During the analysis of the bibliometric data; 2) before and during the expert interviews; and 3) in the process of drawing together all the results and reporting them in this summary.

The main obstacle to detecting the moments of denationalization (Sassen, 2007, 2013) and the influence of Nordic knowledge in the bibliometric data had to do with the coding process in the POLNET project. As explained in Chapter 6 on methodology, all country teams abided by the same coding system to create a coherent and comparable data set of all five countries. Hence, each publication was coded according to the place and type of publication. This protocol had consequences for the conclusions drawn from the data on the events of denationalization in the use of evidence. Coding according to the location of the publisher meant that any publications that were based on, for instance, the OECD PISA data, but were published by Finnish organizations in Finland, were coded as "domestic." Any report or book published by the Nordic Council was published in Copenhagen, Denmark, so it was coded in the Finnish dataset as "regional," but in the Danish dataset as "domestic." These obstacles had consequences for the analysis of data in the first and second substudies (publications I and II).

In the first substudy (Publication I) the issue was addressed by double-checking the findings of bibliometric analysis with three complementary methods. The first method was conducting a content analysis of the ten policy documents that were identified as the white paper and nine green papers. Second, we examined the titles

of all 677 documents included in the Finnish database to see what their topic was, and how international rankings or national evaluations featured in the knowledge base of the reform. Third, we did a background search for any affiliations that the most cited authors had during the time when they published the texts that were among the most cited publications. This allowed us in the POLNET to understand better the networks they were part of and allowed me in this dissertation to discern the assemblages of knowledge and policies that these authors were connected to. The details of these methods are explained in Chapter 6.

In the second substudy (Publication II), the bibliometric analysis revealed that regional, Nordic references were practically non-existent. We double-checked this finding by looking at the exact publishers of the most cited Nordic authors and their location and decided to conduct interviews in three Nordic countries to find out if the low amount of regional bibliometric references really corresponded with the actual value given to Nordic knowledge and cooperation in the reform processes. This led to 18 expert interviews in total in Finland (N=5), Iceland (N=5), and Norway (N=8).

In the case of expert interviews, I stumbled into one typical obstacle in elite interviews, access to the elite (Dexter, 2006; Mykkänen, 2001). This was especially a challenge in Finland. As the working groups I examined had operated from 2010 to 2012, it was difficult to first find the members and their contact information. In fact, some of them had retired, passed away, or moved on to other organizations. As this research was conducted during the global Covid-19 pandemic, some of the civil servants had national responsibilities in handling the crisis and declined the invitation to participate as they already had their hands full. Others declined because they did not feel capable of discussing work that was done almost ten years ago. Some simply did not respond at all. I was eventually able to get five members of the two working groups to participate in the interviews. Luckily, most of them had held key positions in these specific working groups, been involved in further steps in the NCC reform of 2014, and participated widely in other areas of Finnish education policy and politics. Besides the civil servants, other interviewed experts were representatives of political parties and stakeholder organizations.

This further strengthens the validity and reliability of my findings. However, I never intended to treat the accounts of the interviewed experts as absolute truths. Rather, they were read as memory-based narratives (see Chapter 6). This addressed the general critique Jerolmack and Khan (2014) raise about how elite interviews are often used in social science research. They assert that self-reports have limited explanatory value, emphasize individual and abstract portrayals, and neglect the reality of lived experiences, where meaning and action are collectively negotiated and context-dependent (Jerolmack and Khan, 2014). Their critique is further considered in the design of this research, which starts from the collective

complexity of EBPM, including the co-creation of context in policy assemblage processes.

The second challenge of the expert interviews that especially affected the analysis in the second substudy (Publication II), was the interview guides. The interviews in Finland and Norway followed the same interview guide. However, the interviews in Iceland followed a different interview guide designed for another study by Jón Torfí Jónasson. This challenge was addressed by analysing all interviews from the same theoretical vantage point, analysing data based on the same research questions, and focusing only on the extracts in which the informants elaborated on the use or lack of Nordic knowledge and the different forms of Nordic cooperation in regional and international cooperation contexts.

The third challenge regarding the expert interviews was the language barrier in the analysis stage and the use of English in the interviews I conducted in Norway. In terms of analysis of interview data, in the second substudy (Publication II) each one of the three coauthors identified the relevant extracts from expert interviews conducted in their native language and translated them into English, so that all authors could read them. The language challenge complicated the analysis, especially in the third substudy (Publication III). In it, I used interviews that were conducted in three languages, five in Finnish, three in English, and three in Norwegian. I am a native speaker of Finnish and fluent in English. However, I do not speak Norwegian which initially seemed to pose a problem. In the end, however, I was able to understand most parts of the Norwegian language interviews as I do read Swedish, and the two languages are very similar. In the end, I solved the language issue by using online dictionaries and translator programmes, and when in doubt of the exact meaning or nuances of the language, I asked my Norwegian colleagues in the POLNET project for a second opinion.

As discussed in Chapter 6, our research design, consent form, and interview guide did not incorporate the option for utilizing multiple languages within a single interview. This issue has been highlighted by applied linguists in recent years, underlining the significance of providing multilingual interviewees with the choice of language or the ability to switch between languages during research interviews (Rolland, 2023). They emphasize the potential consequences of an alternative approach, which could restrict self-expression (Rolland, 2023), and consequently, hinder the collaborative construction of knowledge in qualitative research interviews (Mann, 2011). After all, interviews serve as dynamic "sites of social interaction, where ideas, facts, views, details, and stories are collaboratively produced by interviewee and interviewer" (Mann, 2011, p. 8). As elucidated in Chapter 6, I extended the option to experts interviewed in English to switch to their native language Norwegian if they deemed it necessary. However, none of the interviewees availed themselves of this option. This could perhaps be attributed to their extensive international connections, fluency in English, and familiarity with

expressing their experiences and insights regarding policy reform work in English, or to the fact that I do not speak Norwegian and only partially understand it. Given that the interviews primarily delved into their professional lives, emotions and personal sentiments were not as prominently featured as they might be in research endeavours focused on private or familial aspects.

On the other hand, I found that conducting interviews in English with the informants from the Norwegian expert panels, was surprisingly far easier than conducting interviews with the Finnish informants. Several researchers have noted that elite interviews are often affected by uneven power relations (Aberbach and Rockman, 2002; Dexter, 2006; Mykkänen, 2001; Neumann, 2011). The informants of such interviews are busy and powerful, and often aware that their position in society is higher than that of a researcher. I did not feel such an imbalance of power when conducting the interviews. The articles I read on conducting interviews were from US-based and Hungarian authors (e.g. Aberbach and Rockman, 2002; Neumann, 2011). It might be that societal hierarchy is lower in the Nordic countries. The interviews I conducted felt more like easy going and cosy chats than research interviews, even though we did cover all the topics in the interview guide. It was easier for me to interview the Norwegian experts as it was easier for me to ask for clarification. They also regularly checked if I understood what they were talking about, whereas, in the Finnish interview context, I was expected to know much more beforehand. Many times, the informants in the Finnish context started their sentences with statements like, "well you of course know this…"

What I have realized in retrospect is that what Tavory (2020) has called desirability bias affected my ability to stay alert and open in the interviews in Finland. My informants expected me to be an expert in Finnish education politics, and I wanted them to view me as one. Although Tavory (2020) has referred to desirability bias from the point of view of interviewees, it affected me as the interviewer. I wanted to put my best foot forward. Hence, I was at times unwilling to expose my not knowing to them by asking "silly" questions. Yet, in the interviews in Norway, it was those silly questions that now and then, revealed new angles to the phenomenon of EBPM that I would have missed otherwise.

Finally, what further complicated the analysis was the fact the interview guide was not designed with spatial and assemblage questions in mind. It was originally created to complement the bibliometric data produced in the POLNET project and abided by the research design of POLNET. In its research design and analysis methods, POLNET applied social network analysis (Pizmony-Levy and Baek, 2022), whereas this dissertation examines knowledge and expert networks through the lens of globalization emerging within the national (Sassen, 2013), space as social and relational (Larsen and Beech, 2014; Massey, 2005) and looks at school reforms as policy assemblage processes (Savage, 2020). Even if Sassen (2013, 2007) has claimed that we can apply new readings to existing data, I may have asked more

insightful questions in terms of the relational notion of space and policy as assemblage, had that been my intent from the very beginning of this research journey. In retrospect, it is of course easy to say what could have been done differently. The shortcomings of this research are an illustration of my research journey and emerging as a researcher. As such they are valuable, and their value can hopefully manifest in future research projects on my path as an academic.

9.2 The emergent researcher in a research assemblage

An assemblage view in research means letting go of the bird's eye view and viewing the researcher as part of the assemblage (see Chapter 6). Skeggs (1995) has urged researchers to pay attention to their own positionality and to deeply reflect on what we choose to study, what theories we use, how we analyse and how we write about our research. This study was affected by all these things.

In Chapter 9.1, I described some interview situations as cosy chats. This experience certainly stems from my background. As a white, middle-class researcher, having held expert positions in society, I naturally seemed to expect the elite interviewees to be my equals. I also mastered the concepts they used and spoke the same, high educated, middle-class language. There was a catch in it all, though. I might have overlooked the moments in the interviews where I could have asked clarifying questions and enriched the findings of this research.

My presuppositions and prejudices initially influenced the interviews as well. Having studied Foucauldian theories of power and research on transnational governance, I went into interviews suspiciously, expecting the elite to be the very manifestations of governance and unequal power structures. It took me some time to ease into being more open-minded and to listen to what they said, not focus on hearing what I expected to hear. This also had to do with letting go of the bird's eye view. Studies in politics and policymaking in education are frequently conducted from such a view and position of one who knows better. This has manifested through research that criticized those with decision-making ability and positions. To my mind, doing genuine critical research would require us to critically reflect on ourselves and stay open to co-creation in interview situations, instead of listening through our prejudices.

I was in fact called out by one of my interviewees. They had just told me that EBPM often meant finding the right information to legitimize the proposals the ones in political power wanted to push forward. I must have revealed my thoughts with my facial expression as the interviewee quickly proceeded to point out that this is no different from academics. They claimed that we, too, know what we want to say and then seek theories to frame our claims accordingly. Furthermore, several interviewees in Finland portrayed mistrust towards researchers of education policy and politics, and sociology of education. It was almost like some of them felt their

trust violated by researchers they had opened up to in interviews, who then read their accounts in terms of transnational governance, and publicly criticized their work on curriculum reform.

What I realized is that elite interviews are not just moments of negotiating power between two individuals. In them, two elite subsystems – policymaking and academia – collide and co-create accounts of truths through negotiations of societal positions and power. In conducting any research then, but especially in conducting elite interviews, we join an assemblage of researchers and previous encounters in our field. Sometimes of course this can help us in interviews, but in my case, I had to first regain the trust as a representative of a specific line of researchers, even in situations where I met my interviewees for the very first time.

Finally, the writing process in research that claims to employ assemblage thinking and methodology on policy space is challenging, to say the least. First, I had to stretch my imagination of space. To see space as relational and created through social interactions meant confronting my national imaginaries and ideas of Nordic excellence. Second, finite human language does not support writing that should not just describe an assemblage but be part of it, and find ways to express the state of becoming and the infinite emergence of reality. Whatever choices we make intervene with the phenomenon under study and form the context of the research, as Piattoeva and fellow researchers (2018), and Sobe and Kowalczyk (2018, 2014, 2012), have emphasized. The first choice is the field we engage in. My choice was education policy studies and comparative education. With that choice, I have attached myself to a specific assemblage of scholars and knowledge, and specific angles on globalization. That has positioned me in a long line of researchers, and these researchers' previous negotiations to access elites and the imaginaries they have created influenced the position that my informants viewed me as having. I further co-created my approach to the questions of knowledge, expertise, policy, and globalization through my theoretical choices and within my constantly emerging understanding of the theories and methods I have employed, making this study not just a journey, but an assemblage.

I had ambitions and objectives but I feel I have succeeded only partly. Specifically challenging has been to let go of the bird's eye view, which Carney (2019) saw as essential in comparative education studies, and to let go of my own deeply ingrained imaginaries of space as a flat surface and bound to the territories of nation-states (Massey, 2005). In the future, I hope to have a chance to design a whole research project from a temporal and social understanding of space and pay more attention to conscious self-reflection as a co-creator of the research context from the very beginning of the project.

9.3 Future pathways for research

Throughout this dissertation, my intention was to explore space and policy as an assemblage, positioning myself within the research framework. However, I became less self-reflective than I had initially hoped. Although Sassen (2013, 2007) asserts that old data can be interpreted through new lenses, I discovered this task to be more challenging than anticipated. It was only during my research that I became familiar with theories of relationality and the emergence of space and policy. Analysing data not originally framed with spatial questions and assemblage thinking proved to be more difficult than expected. Therefore, I aspire to embark on a new project that integrates spatial questions and considers the assembled nature of policy and globalization from the outset. A dream study could involve ethnographic research, immersing myself in the moments of policymaking, witnessing negotiations firsthand, rather than merely deciphering outcomes.

My aim was also to develop and experiment with new readings, but I acknowledge that I only scratched the surface. Sassen (2007) emphasizes that developing such readings is a collective endeavour within the research community. I propose combining her insights on globalization, Massey's (2005) theories on space, and policy assemblage thinking derived from the work of Deleuze and Guattari (1987), among others. Moving forward, collaborative efforts within the research community are essential to develop fresh perspectives, vocabularies, and methodologies. The dynamic nature of policymaking and politics in education demands systematic investigation, including decoding moments of denationalization and examining policy actors' connections.

In this study, I examined how globalization manifests, exploring the amalgamation of knowledge and expertise. Specifically, I scrutinized how national actors engage in global policy, observing the reciprocal influence between global dynamics and national education reforms. Further research is needed on how national actors shape policies within the global education policy arena, particularly through regional cooperation. The work of Karen Barad (2007) could be useful in such an endeavour. I encountered her work during this dissertation journey and it greatly inspired me. Although I could not fully integrate her ideas here, her diffractive methodology resonates with me, envisioning research as light hitting a prism, revealing previously undiscovered insights. I aspire to focus more on the research process in the future, rather than solely on the end product. Engman, Ennser-Kananen, and Saarinen (2022) explore diffraction as a theory for collective thinking about visibility, which offers valuable insight. Exploring what is seen and unseen holds promise for future research endeavours grounded in relational and social concepts of space, guided by assemblage thinking and diffractive methodology. Such an approach could deepen our understanding of globalization mechanisms, and offer new avenues for education policy studies in the future.

10 Conclusions and final remarks

In this dissertation, I set out to explore how globalization is done in education reforms through assemblages of knowledge and experts, in era in which knowledge has become policy (Grek, 2013). I investigated evidence-based policymaking and expert power in Nordic school reforms, utilizing the relational and social concepts of space (Larsen and Beech, 2014; Massey, 2005), assemblage thinking inspired especially by the work of Gilles Deleuze and Félix Guattari (1983, 1987), and the idea that globalization emerges within the national context (Sassen, 2007). The study aimed to achieve three objectives. First, empirically, it sought to explore the globalization of education through evidence-based policymaking and expert networks in Nordic school reforms. Second, theoretically, it aimed to apply discussions on the co-construction of education policy contexts; examine the interconnectedness of knowledge, actors, and places; and investigate the emergence of a global education policy space. Third, methodologically, it aimed to experiment with spatial and assemblage reading of empirical findings, drawing on Sassen (2007) to decode moments of denationalization, as well as the arrangement of different components into the assemblage of education reform processes (Baker and McGuirk, 2017).

Although I initially set distinct theoretical and empirical objectives, the more the study advanced, the clearer it became that the theoretical and empirical contributions of this dissertation were intertwined. In general, the findings of this study strengthen the findings of previous studies on the globalization of education that international organizations exercise power, and knowledge hierarchies that contribute to that power. More importantly, this study underscored that globalization is not merely an overarching force superseding national autonomy and actors but, rather, a process that transforms national actors into accomplices of global forces through the amalgamation of evidence, expertise, and educational reforms.

In this study, I examined how knowledge, expertise, and meeting places shape education reforms. I focused on moments when reforms transcended national boundaries. The study revealed how globalization occurs through complex interactions between national, Nordic regional, and global spheres. These spaces are not isolated; instead, they are intertwined and interconnected. They form simultaneous components within different policy assemblages. The study

underscored the emergence of the global within the national and regional, revealing how national actors engage in global policy within international settings and leverage regional consensus to advance national interests in the global policy space. By exploring the interwoven nature of policy spaces at national, regional, and global levels, the study highlights the pivotal role of nationally appointed experts as mediators and translators in navigating these complex landscapes. Evidence-based policymaking, influenced by international organizations like the OECD, shapes power dynamics in education policy reforms. These findings underscore the hierarchical nature of evidence, often favouring international knowledge over regional or national inputs. Furthermore, the research reveals the non-linear and non-rational aspects of evidence-based policymaking, illustrating how experts and knowledge networks shape different policy spaces, from which policy emerges as an assemblage held together by multisited power dynamics and a multiplicity of desires.

Methodologically, I adopted a spatial and assembled approach to the empirical findings. Inspired by policy assemblage thinking and the assemblage theory of Deleuze and Guattari (1987), this approach considers desire as a driving force in gaining power and staking claims in the global education policy space, ultimately shaping the idea of what counts as progress in education and what the ideal society is that education policymaking should strive towards. Taking this novel approach, I traced moments when the global emerges within the national context, offering a nuanced understanding of globalization in education. This spatial and assembled reading uncovers the mechanisms of knowledge politics underlying global education policy adoption and presented as evidence-based policymaking. However, collective effort is required to develop these ideas further, as noted by Sassen (2007).

I have built on a plethora of previous studies in comparative education and critical policy sociology, public policy and administration, sociology, geography, philosophy, and global political economy. As I move on to other assemblages and journeys, my wish is to have created an opening for new thinkers in policy assemblage research. There is much to be discovered in the events where the global arises within national, in the desires and processes of deterritorialization and reterritorialization that influence and direct the course of education reforms in today's transnational policymaking environments, and in the regional actors doing national policy in the global setting. I firmly believe that thinking space as deeply relational and social, combined with assemblage theory and methodology, offers academics a useful tool for continuing our collective efforts to make sense of the mess of policymaking and sometimes overwhelmingly abstract globalization.

This approach also offers us valuable means of intervention for academics. Not only does it foster a more nuanced comprehension of the dynamics inherent in today's complex educational policy landscape and the entanglements of national,

regional, and global. In addition, this approach provides an avenue for identifying specific places and moments within the space/time of policymaking, wherein autonomous components, coalesce and attach to the larger assemblage (Rabinow, 2014), thereby enabling certain possibilities in education reforms while rendering others improbable. These tangible moments represent globalization in action, wherein homogenizing and standardizing notions of children, schools, teachers, and education are advanced. It is within these moments that the promise of academic activism becomes apparent, and the battles over the future child are waged.

This study has illustrated the power of numbers and of experts skilled in narrating numbers and translating them to serve national policy contexts and ambitions. Powerful narratives based on statistics and rankings are marshalled to uphold educational truths and construct the ideal child or the ideal education, simultaneously staking claims to the futures of nation-states and the whole planet. This process is facilitated by evidence-based policy-making practices as the content of policy is greatly shaped by the evidence, or knowledge, it is based on. Such knowledge is increasingly rooted in normative perceptions of standardized and measurable individuals that can contribute to the global competition of nation-states. As a community of researchers, I believe it to be our collective responsibility to continually disrupt and intervene in the processes of assemblage formation that reinforce the perception of humans as mere "human doings" rather than "human beings." We must persist in identifying the junctures within policy assemblages where alternative truths can be introduced to the global, regional, and national educational landscapes. It is essential to promoting the multiplicity of our shared space and existence, to value life beyond its economic worth, progress, finite achievements, and competencies.

References

Aberbach, J.D. & Rockman, B.A. (2002). Conducting and Coding Elite Interviews. *PS: Political Science and Politics, 35*(4), pp. 673–676.

Addey, C. & Piattoeva, N. (2022). What a mess: Intimacies, multiple sense and matters of concern in education policy research (an introduction). In C. Addey & N. Piattoeva (Eds.), *Intimate Accounts of Education Policy Research: The Practice of Methods*, (pp.1–15). Routledge.

Allen, J. (2009). Three spaces of power: Territory, networks, plus a topological twist in the tale of domination and authority. *Journal of Power, 2*, 197–212.

Aneesh, A. (2017). 'Relocating Global Assemblages': An Interview with Saskia Sassen. Science, *Technology and Society, 22*(1), pp.128–134.

Anderson-Levitt, & Gardinier, M. (2021). Introduction contextualising global flows of competency-based education: polysemy, hybridity and silences. *Comparative education, 57* (1), pp.1–18.

Anthias, F. (2009). *Methodological nationalism versus methodological transnationalism: moving beyond the binary*. http://www.socant.su.se/polopoly_fs/1.30452.1320939981!/FloyaAnthias papers.pdf

Antikainen, A. (2006). In search of the Nordic Model in Education. Scandinavian *Journal of Educational Research, 50*(3), 229–243. https://doi.org/10.1080/00313830600743258

Anttonen, A. & Meagher, G. (2013). Mapping marketisation: concepts and goals. In G.Meagher & M.Szebehely, (Eds.), *Marketisation in Nordic eldercare:a research report on legislation, oversight, extent and consequences*, (pp. 13–22). Department of Social Work, Stockholm University.

Arnesen, A. L. & Lundahl, L. (2006). Still social and democratic? Inclusive education policies in the Nordic welfare states. *Scandinavian Journal of Educational Research, 50*(3), pp. 285–300. https://doi.org/10.1080/00313830600743316

Baek, C. (2023). Expertise-seeking Arrangements in Education Policymaking: A Comparison between Norway and the United States. In Tröhler, D.; B. Hörmann, B., S.Tveit, & I. Bostad (Eds.), *The Nordic Education Model in Context: Historical Developments and Current Renegotiations*, (pp. 196–214). Routledge.

Baek, C., Hörmann, B., Karseth, B., Pizmony-Levy, O., Sivesind, K., & Steiner-Khamsi, G. (2018). Policy learning in Norwegian school reform: A social network analysis of the 2020 incremental reform. *Nordic Journal of Studies in Educational Policy, 4*(1), pp. 24–37. https://doi.org/10.1080/20020317.2017.1412747

Baker, T. & McGuirk, P. (2017). Assemblage thinking as methodology: Commitments and practices for critical policy research. *Territory, Politics, Governance, 5* (4), pp.425–442.

Ball, S.J. (2017). *The Education Debate*. 3rd Edition. Policy Press.

Ball, S.J. (2013). *Foucault, Power, and Education*. 1st ed. Routledge.

Ball, S.J. & Junemann, C. (2012). *Networks, New Governance and Education*. The Policy Press.

Barad, K. (2007). *Meeting the Universe Halfway*. Duke University Press.

Bayly, C. A., Beckert, S., Connelly, M., Hofmeyr, I., Kozol, W., & Seed, P. (2006). AHR conversation: On transnational history. *The American Historical Review, 111* (5), pp. 1441–1464. https://doi.org/10.1086/ahr.111.5.1441

Beamer (2002). Elite Interviews and State Politics Research. *State Politics and Policy Quarterly, 2*(1), pp. 86–96

Beech, J., & Artopoulos, A. (2016). Interpreting the circulation of educational discourse across space: Searching for new vocabularies. *Globalisation, Societies and Education, 14* (2), pp. 251–271. https://doi.org/10.1080/14767724.2015.1025713

Berntzen, E. (2017). State- and nation-building in the Nordic region: Particular characteristics. In O. Knutsen (Ed.), *The Nordic models in political science: Challenged, but still viable?* (pp. 19–44). Fagbokforlaget.

Blair, T. (1997). *New Labour Because Britain Deserves Better*. http://www.labour-party.org.uk/manifestos/1997/1997-labour-manifesto.shtml

Braun, A., Ball, S.J., Maguire, M. & Hoskins, K. (2011) Taking context seriously: towards explaining policy enactments in the secondary school. *Discourse: Studies in the Cultural Politics of Education. 32* (4), pp. 585–596. https://doi.org/10.1080/01596306.2011.601555

Buchanan, I. 2020. *Assemblage Theory and Method: An Introduction and Guide*. London: Bloomsbury Academic.

Buchanan, I. 2015. "Assemblage Theory and Its Discontents." *Deleuze Studies 9* (3), pp. 382–392. doi:10.3366/dls.2015.0193.

Cairney, P. (2016). *The politics of evidence-based policymaking*. Palgrave Macmillan.

Cairney, P., & Oliver, K. (2017). Evidence-based policy-making is not like evidence-based medicine, so how far should you go to bridge the divide between evidence and policy? *Health Research Policy and Systems, 15* (1), 35. https://doi.org/10.1186/s12961–017–0192-x

Calderon, A.J. (2018). *Massification of higher education re-visited*. RMIT University. http://cdn02.pucp.education/academico/2018/08/23165810/na_mass_revis_230818.pdf

Carney, S. (2019). Writing Global Education Policy Research. In M. Parreira do Amaral, G. Steiner-Khamsi, G. & C. Thompson (Eds.) Researching the Global Education Industry. *Commodification, the Market and Business Involvement*, (pp.251–272). Palgrave Mcmillan.

Carvalho, L.M. (2012). The fabrication and travels of knowledge-policy instrument. *European Educational Journal, 11* (2), pp. 172–188.

Christensen, J., & Holst, C. (2017). Advisory commissions, academic expertise and democratic legitimacy: The case of Norway. *Science & Public Policy, 44* (6), 821–833. https://doi.org/10.1093/scipol/scx016

Christensen, J., Holst, C., & Molander, A. (2022). *Expertise, Policy-making and Democracy*. Routledge.

Christensen, J. & Hesstvedt, S. (2019). Expertisation of greater representation? Evidence from the Norwegian advisory commissions. *European Politics and Society, 20* (1), pp. 83–100, https://doi.org/10.1080/23745118.2018.1515861

Christiansen, P. M. et al. (2010). Varieties of Democracy: Interest Groups and Corporatist Committees in Scandinavian Policy Making, *Voluntas, 21*, pp. 22–40. https://doi.org/10.1007/s11266–009–9105–0

Clarke, J. (2019). Foreword. In N. Papanastasiou (Ed.), *The politics of scale in policy: Scalecraft and education governance* (pp. v–xii). Policy Press.

Clarke, J., Bainton, D., Lendvai, N., & Stubbs, P. (2015). *Making policy move: Towards a politics of translation and assemblage*. Bristol University Press, Policy Press.

Considine, M. (1994). *Public policy: a critical approach*. Macmillan Education Australia.

Cowen, Robert. 2014. "Comparative education: stones, silences, and siren songs." *Comparative Education 50*, (1): 3–14. https://doi.org/10.1080/03050068.2013.871834

Curry, M. J., & Lillis, T. (2017). Problematizing English as the Privileged Language of Global Academic Publishing. In M.J. Curry & T. Lillis (Eds.), *Global Academic Publishing. Policies, Perspectives and Pedagogies*, (pp.1–20). Multilingual Matters. https://doi.org/10.21832/9781783099245–006

Dale, R., & Robertson, S. L. (2009). Beyond Methodological 'ISMS' in Comparative Education in an Era of Globalisation. In R.Cowen & A.M. Kazamias (Eds.), *International Handbook of Comparative Education*, (pp.1113–1127). Springer.

Dale, R. (2009). Contexts, constraints and resources in the development of European educa-tion space and European education policy. In R. Dale & S. Robertson (Eds.), *Globalisation and Europeanisation in Education* (pp. 23–43). Oxford: Symposium Books.

DeLanda, M. (2016). *Assemblage Theory*. Edinburgh University Press.

Delhey, J., & Newton, K. (2005). Predicting cross-national levels of social trust: Global pattern or Nordic exceptionalism? *European Sociological Review, 21*(4), 311–327.

Deleuze, G. & Guattari, F. (1987). *A thousand plateaus. Capitalism and schizophrenia*. Translated by Brian Massumi. University of Minnesota Press.

Deleuze, G. & Guattari, F. (1983). *Anti-Oedipus: Capitalism and Schizophrenia*. Translated by Robert Hurley, Mark Seem, and Helen Lane. University of Minnesota Press.

Dexter, L.A. (2006). *Elite and specialized interviewing*. 2nd Edition. ECPR Press.

Dolowitz, D. P. (2018). Policy learning and diffusion. In H. K. Colebatch & R. Hoppe (Eds.), *Handbook on policy, process and governing*. Edward Elgar Publishing.

Dølvik, J. E., Fløtten, T., Hippe J. M. & Jordfald, B. (2015). *The Nordic model towards 2030 A new chapter?* Fafo report 2015:07. https://www.fafo.no/images/pub/2015/20412.pdf

Dovemark, M., Kosunen, S., Kauko, J., Magnúsdóttir, B., Hansen, P., & Rasmussen, P. (2018). Deregulation, privatisation and marketisation of Nordic comprehensive education: Social changes reflected in schooling. *Education Inquiry, 9* (1), 122–141.

Elgenius, G. (2011). *Symbols of nations and nationalism: celebrating nationhood*. Palgrave Macmillan.

Engman, M., Ensser-Kananen, J., & Saarinen, T. (2022). A Diffractive reading. In J. Ennser.Kananen & T.Saarinen (Eds.), *New Materialist Explorations into Language* (pp. 175-186). Springer.

Espeland, W. (2015). Narrating numbers. In R. Rottenburg, S. E. Merry, S. J. Park, & J. Mugler (Eds.), *The world of indicators. The making of governmental knowledge through quantification* (pp. 56–75). Cambridge University Press.

Esping-Andersen, G. (1990). *The Three Worlds of Welfare Capitalism*. Princeton University Press.

Eyal, G. (2019). *The crisis of expertise*. Wiley.

Exley, S., Braun, A., & Ball, S.J. (2011). Global education policy: networks and flows. *Critical Studies in Education 52*(3), pp. 213–218, DOI:10.1080/17508487.2011.604079

Ferlie, E., Ashburner, L., Fitzgerald, L., & Pettigrew, A. (1996). *The New Public Management in Action.* Oxford University Press.

Fox, N.J. & Allerd, P. (2017). *Sociology and the New Materialism. Theory, Research, Action.* Sage.

Froehlich, D.E,Rehm, M. & Rienties. B.E. (Eds.) (2019). *Mixed methods social network analysis. Theories and methodologies in learning and education*. Routledge.

Goldstein, K. (2002). Getting in the Door: Sampling and Completing Elite Interviews. *PS: Political Science and Politics, 35*(4), pp. 669–672.

Gorur, R., Sellar, S. & Steiner-Khamsi, G. (2018). Big data and even bigger consequences. In R.Gorur, S.Sellar & G.Stener-Khamsi (Eds.) *Comparative Methodology in the Era of Big Data and Global Networks. World Yearbook of Education 2019,* (pp.1–9). Routledge.

Gorur, R. (2016). Seeing like PISA. A cautionary tale about the performativity of international assessments. *European Educational Research Journal, 15*(5), pp. 598–616. https://doi.org/10.1177/1474904116658299

Gorur, R. (2015) Producing calculable worlds: education at a glance, *Discourse: Studies in the Cultural Politics of Education, 36* (4), pp. 578–595, DOI: 10.1080/01596306.2015.974942

Gorur, R. (2011). Policy as Assemblage. *European Educational Research Journal, 10*(4), pp. 611–622.

Greenhough, B. (2012). On the agencement of the academic geographer. *Dialogues in Human Geography, 2*(2).

Grek, S. (2013). Expert moves: international comparative testing and the rise of expectocracy. *Journal of Education Policy, 28*(5), pp. 695–709.

Grek, S. (2012). The black box revisited: International comparative studies as tools in governing Europe." In G. Steiner-Khamsi & F. Waldow (Eds.). *World yearbook of education 2012 – policy borrowing and lending*, (pp.41–61). Routledge.

Grek, S. & Ozga, J. (2010). Re-inventing Public Education. The New Role of Knowledge in Education Policy Making. *Public Policy and Administration, 25*(3), pp. 217–288.

Grek, S. (2009). Governing by numbers: The PISA 'effect' in Europe. *Journal of Education Policy 24*(1), pp. 23–37.

Gulson, K.N., Lewis, S., Lingard, B., Lubienski, C., Takayama, K., & Taylor Webb, P. (2017). Policy mobilities and methodology: a proposition for inventive methods in education policy studies. *Critical Studies in Education, 58*(2), pp.224-241. http://dx.doi.org/10.1080/17508487.2017.1288150

Head, B.W. (2008). Three Lenses of Evidence-Based Policy. The Australian *Journal of Public Administration, 67*(1), pp. 1–11.

Hohti, R., & Truman, S.E. (2021). Anglocentrism in the Academy: On Linguistic Privilege, Mastery and Hoito, *Reconceptualizing Educational Research Methodology, 12*(2), https://doi.org/10.7577/rerm.4675.

Holli, A. M., & Turkka, S. (2021). Tieteen muuttuva rooli korporativisessa neuvonannossa. Pitkittäisanalyysi tutkijoiden asemasta ministeriöiden valmistelutyöryhmissä 1980–2018. [The changing role of science in corporate consulting. Longitudinal analysis of the position of researchers in preparatory working groups of ministries 1980‑2018), *Politiikka, 63*(1), 54–81. https://doi.org/10.37452/politiikka98500

Holst, C., & Molander, A. (2019). Epistemic democracy and the role of experts. *Contemporary Political Theory, 18*(4), 541–561. https://doi.org/10.1057/s41296–018–00299–4

Holst, C., & Molander, A. (2017). Public deliberation and the fact of expertise: Making experts accountable. *Social Epistemology, 31*(3), 235–250. https://doi.org/10.1080/02691728.2017.1317865

Huntington, S.P. (1991). Democracy's Third Wave. *Journal of Democracy, 2*(2), pp. 12–34.

Hörmann, B., & Sivesind, K. (2022). Structuring school reform policy with evidence: The inter-mediational role of knowledge sources and arguments. In B. Karseth, , K. Sivesind, & G. Steiner-Khamsi (Eds.), *Evidence and Expertise in Nordic Education Policy: A Comparative Network Analysis*. (pp. 183–227). Palgrave Macmillan. DOI: https://doi.org/10.1007/978–3-030–91959–7

Jackson, A. Y., & Mazzei L. A. (2012). *Thinking With Theory in Qualitative Research: viewing data across multiple perspectives*. Routledge.

Jacobsson, B., Laegreid, P., & Pedersen, O.K. (2004). *Europeanization and transnational states: Comparing Nordic central governments*. Routledge.

Jerolmack, C. & Khan, S. (2014). Talk Is Cheap: Ethnography and the Attitudinal Fallacy. *Sociological Methods & Research, 43*(2), pp. 178–209

Jónasson, J.T. & Bjarnadóttir, V.S. (2023). Nordic Interactive and Comparative Spaces Within the Arena of Education, *Nordic studies in education, 43*(1), pp. 25–42.

Kalalahti, M. & Varjo, J. (2020). Revisiting universalism in the Finnish education system. *Research on Finnish Society, 13*, pp. 25–40.

Kauko, J. Centeno, V., Piattoeva, N., Candido, H., Gurova, G., Medvedeva, A., Santos, Í., Suominen, O., & Xingguo, Z. (2018). Layers of reflexivity in comparative research. In In J. Kauko, R. Rinne, & T. Takala (Eds.). *Politics of Quality in Education. A Comparative Study of Brazil, China and Russia*, (pp.18–43). Routledge.

Karseth, B., Sivesind, K., & Steiner-Khamsi, G. (Eds.). (2022*). Evidence and Expertise in Nordic Education Policy: A Comparative Network Analysis*. Palgrave. DOI: https://doi.org/10.1007/978–3-030–91959–7

Khosrowi, D. (2021). Evidence-based policy. In J. Reiss & C. Heilmann (eds.), *Routledge Handbook of Philosophy of Economics*, (pp. 370–384). Routledge. DOI: 10.4324/9781315739793–33

Koski, L. (2011). Teksteistä teemoiksi – Dialoginen tematisointi. [From texts to themes –dialogical thematization]. In A. Puusa & P. Juuti (Eds.), *Menetelmäviidakon raivaajat: perusteita laadullisen tutkimustavan valintaan,* (pp. 126–149). Johtamistaidon opisto, JTO.

Krick, E., Christensen, J. & Holst, C. (2019). Between 'Scientization' and a 'Participatory Turn'. Tracing shifts in the governance of policy advice. *Science and Public Policy, 46*(6), pp. 927–939. https://doi.org/10.1093/scipol/scz040

Kristinsson, G.H. (2009). More save than sound? Cabinet ministers in Iceland. In K. Downing & P. Dumont (Eds.), *The Selection of ministers in Europe. Hiring and firing*, (pp.194–203). Routledge.

Kumah, E. A., McSherry, R., Bettany- Saltikov, J., van Schaik, P., Hamilton, S., Hogg, J., & Whittaker, V. (2022). Evidence-informed vs evidence-based practice educational interventions for improving knowledge, attitudes, understanding and behaviour towards the application of evidence into practice: A comprehensive systematic review of undergraduate students. *Campbell Systematic Reviews, 18*, e1233. https://doi.org/10.1002/cl2.123

Laine, J. (2020). Nordic cooperation. In W. Wassenberg & B. Reitel (Eds.), *Critical dictionary on cross border cooperation in Europe*, (pp. 615–625). Peter Lang. https://doi.org/10.3726/b15774

Landahl, J. (2015). Det nordiska skolmötet som utbildningspolitisk arena (1870–1970). Ett rumsligt perspektiv på den moderna pedagogikens historia. [The Nordic school meeting as an educational political arena (1870– 1970). A spatial perspective on the history of modern pedagogy]. *Utbildning & Demokrati, 24*(3), 7–23.

Lamy, P. and Laïdi, Z. (2002) 'A European approach to global governance'. *Progressive Politics 1*(1), pp. 1–12.

Larsen, M. A., & Beech, J. (2014). Replacing the old spatial empires of the mind. *European Education, 46*(1), pp.75–94. https://doi.org/10.2753/EUE1056–4934460104

Latour, B. (2004A). *The politics of nature. How to bring science into democracy*. (transl. by C. Porter). Cambridge, MA: Harvard University Press.

Latour, B. (2004B). Why Has Critique Run out of Steam? From Matters of Fact to Matters of Concern. *Critical Inquiry, 30*(2), pp. 225–248.

Law, J. (2004). *After method: mess in social science research*. Routledge.

Law, J. (1999). After ANT: complexity, naming and topology. In Law, J. & Hassard, J. (Eds.). *Actor Network Theory and After*, (pp.1–14). Blackwell Publishing.

Lawn, M., and S. Grek. 2012. *Europeanising education: Governing a new policy space*. Symposium.

Lawn, M., Rinne, R., & Grek, S. (2011). Changing spatial and social relations in Europe. In J. Ozga, P. Dahler-Larsen, C. Segerholm, & H. Simola (Eds.). *Fabricating Quality in Europe: Data and Governance in Europe*, (pp. 11–18). Routledge

Lawn, M. (2006). Soft Governance and the Learning Space of Europe. *Comparative European Politics, 4,* pp. 272–288.

Lewis, S., & Spratt, R. (2024). *Assembling Comparison Understanding Education Policy through Mobilities and Assemblage*. Bristol University Press.

Li, T.M. (2007). Practices of assemblage and community forest management. *Economy and society, 36*(2), pp. 263–293.

Lie, S., Linnakylä, P., & Roe, A. (2003). *Northern lights on PISA: Unity and diversity in the Nordic countries in PISA 2000*. University of Oslo, Department of Teacher Education and School Development.

Lingard, B. (2021A). Globalisation and education: theorising and researching changing imbrications in education policy. In B. Lingard (Ed.). *Globalisation and education*, (pp. 1–27). Routledge.

Lingard, B, (2021B). Multiple temporalities in policy sociology in education. *Critical Studies in Education 62*(2), pp. 1–16.

Lingard, R., Martino, W., & Rezai-Rashti, G. (2013) Testing Regimes, Accountabilities and Education Policy. *Journal of Education Policy 28*(5), pp. 539–556.

Lingard, R., Creagh, S., & Vass, G. (2012). Education policy as numbers: data categories and two Australian cases of misrecognition. *Journal of Education Policy, 27* (3), pp.315–333.

Maasen, S. & Weingart, P. (2005). *Democratization of expertise? Exploring novel forms of scientific advice in political decision-making*. Springer.

Magnúsdottir, B.R. & Jónasson, J.T. (2022).The Irregular Formation of State Policy Documents in the Icelandic Field of Education 2013–2017. In: B. Karseth, K. Sivesind, & G. Steiner-Khamsi (Eds.), *Evidence and Expertise in Nordic Education Policy: A Comparative Network Analysis*. (pp. 149–182). Palgrave Macmillan. DOI: https://doi.org/10.1007/978–3-030–91959–7

Mann, S. (2011). A Critical Review of Qualitative Interviews. *Applied Linguistics 32* (1), pp. 6–24. doi:10.1093/applin/ amq043

Martens, K. & Niemann, D. (2013). When do numbers count? The differential impact of PISA rating and ranking on education policy in Germany and the US. *German Politics, 22*(3), pp. 312–332.

Martens, K. (2007). How to become an influential actors- The "comparative turn" in OECD education policy. In K. Martens, A. Rusconi, & K. Lutz (Eds.), *Transformations of state and global governance*. Routledge.

Massey, D. (1991). A global sense of place. marxism today, june, repr. In D. Massey (Ed.), *Space, place and gender,* (pp. 146–156). Polity Press.

Massey, D. (1994). *Space, place and gender*. Polity Press.

Massey, D. (2005). *For space*. SAGE Publications.

Massey, D. (2007). *World city*. Polity Press.

Massey, D., Research Group, H. G., Bond, S., & Featherstone, D. (2009). The possibilities of a politics of place beyond place? A conversation with Doreen Massey. *Scottish Geographical Journal, 125*(December), 401–420. https://doi.org/10.1080/14702540903364443

Menashy, F. & Verger, A. (2019) Network analysis, education policy, and international development. Editorial. *International Journal of Educational Development, 64,* pp. 58–61.

Moore, A. (2017). *Critical elitism. Deliberation, democracy and the problem of expertise.* Cambridge University Press.

Morgan, C., & Volante, L. (2016). A review of the Organisation for Economic Cooperation and Development's international education surveys: Governance, human capital discourses, and policy debates. *Policy Futures in Education,14*(6), 775–792.

Morita, A. (2014). The Ethnographic Machine: Experimenting with Context and Comparison in Strathernian Ethnography. *Science, Technology, & Human Values, 39*(2), pp. 214–235.

Mundy, K., Green, A., Lingard, B., & Verger, A., (Eds.). (2016). *The Handbook of Global Education Policy*. John Wiley & Sons.

Mykkänen. J. (2001). Eliittihaastattelu. [An elite interview]. *Politiikka 43*(2), pp.108–127.

NESH. (2021). *Guidelines for Research Ethics in the Social Sciences and the Humanities*. 5th edition. The National Committee for Research Ethics in the Social Sciences and the Humanities.

Neumann, E. (2011). Negotiating Power: interviews with the policy elite – stories from Hungary lost between genres. *European Educational Research Journal, 10*(2), pp.225–232.

Nichols, T. (2017). *The Death of Expertise: The Campaign Against Established Knowledge and Why It Matters*. Oxford: Oxford University Press.

Nordin, A., & Sundberg, D. (2021). Transnational Competence Frameworks and National Curriculum-making: the case of Sweden. *Comparative Education. 57* (1). 19–34.

Normand, R. (2017). Policy learning and expertise in European education. In R. Normand & J-L. Derouet (Eds.), *A European politics of education. Perspectives From Sociology, Policy Studies and Politics,* (pp. 73–91). Routledge.

Nóvoa, A., & Yariv-Mahal, T. (2003). Comparative research in education: A mode of governance or a historical journey? *Comparative Education, 39*(4), pp. 423–439.

Nye, J. (2004). *Soft Power – The Means to Success in World Politics*. Public Affairs.

Opetus- ja kulttuuriministeriö. (2012). *Tulevaisuuden perusopetus*. [Future Basic Education]. Opetus- ja kulttuuriministeriön työryhmämuistioita ja selvityksiä 2012:6.

Opetus- ja kulttuuriministeriö. (2010). *Perusopetus 2020 – yleiset valtakunnalliset tavoitteet ja tuntijako* [Basic education 2020 – Common

National Aims and Distribution of Lesson Hours]. Opetus- ja kulttuuriministeriön työryhmämuistioita ja selvityksiä 2010:1.

Ozga, J. (2020). Elites and Expertise: the Changing Material Production of Knowledge for Policy. In Fan, G. & Popkewitz, T. (Eds.) *Handbook of Education Policy Studies. Values, Governance, Globalization, and Methodology,* Volume 1, (pp. 52–69). Springer.

Ozga, J, (2019). The Politics of Accountability. *Journal of Educational Change, 21*, pp. 19–35.

Ozga, J. (2009). Governing education through data in England: from regulation to self-evaluation. *Journal of Education Policy, 24*(2), pp.149–162.

Paakkari, A. (2020). *Entangled Devices. An Ethnographic Study of Students, Mobile Phones and Capitalism*. Doctoral dissertation. Helsinki Studies in Education, 70. Unigrafia.

Parkhust, J. (2017). *The Politics of Evidence. From evidence-based policy to the good governance of evidence.* Routledge.

Pawson, R. (2006). Evidence-based policy: The promise of systematic review. In R. Pawson (Ed.), *Evidence-based policy: A realist perspective*, (pp. 2–16). SAGE Publications. https://doi.org/10.4135/9781849209120

Peck, J., & Theodore, N. (2015). *Fast policy: Experimental statecraft at the thresholds of neoliberalism.* University of Minnesota Press.

Petterson. D., Popkewitz, T.S., & Lindblad, S. (2017). In the grey zone: large-scale assessment-based activities betwixt and between policy, research and practice. *Nordic Journal of Studies in Educational Policy, 3*(1), pp. 29–41.

Piattoeva, N. & Boden, R. (2020). Escaping numbers? The ambiguities of the governance of education through data. *International Studies in Sociology of Education, 29* (1–2), pp. 1–18.

Piattoeva, N., Klutas, A., & Suominen, O. (2018). Making and mobilizing contexts in policy and research. In R. Gorur, S. Sellar, & G. Steiner-Khamsi (Eds.), *Comparative Methodology in the Era of Big Data and Global Networks,* (pp. 202–218). (World Yearbook of Education; No. 2019). Routledge.

Piattoeva, N., Gorodski Centeno, V., Suominen, O., & Rinne, R. (2018). Governance by data circulation? The production, availability, and use of national large-scale assessment data. In: J.Kauko, R.Rinne, & T. Takala (Eds.). *Politics of Quality in Education A Comparative Study of Brazil, China, and Russia*, (pp.115–136). Routledge.

Piattoeva, N. (2015). Elastic numbers: National examinations data as a technology of government. *Journal of Education Policy, 30*(3), pp. 316–334.

Pitkänen, H. (2019). *Arviointi, tieto ja hallinta: Peruskoulun paikallisen arvioinnin genealogia.* [Evaluation, knowledge and governance: the geneology of the local evaluation of primary school]. Helsinki Studies in Education, 50. Unigrafia.

Pizmony-Levy, O. & Baek, C. (2022). Exploring the architecture of policy knowledge: a methodological note. In: B. Karseth, K. Sivesind, & G. Steiner-Khamsi (Eds.), *Evidence and Expertise in Nordic Education Policy: A Comparative Network Analysis*. Palgrave Macmillan, (pp. 39–76). DOI: https://doi.org/10.1007/978–3-030–91959–7

Popkewitz, T.S. (2012). Numbers in the grid of intelligibility. Making sense of how educational truth is told. In H. Lauder, M. Young, H. Daniels, M. Balarin &

J. Lowe (Eds.). *Education for the Knowledge Economy?* (pp.169–191). Routledge.

Popkewitz, T.S. (2008). *Cosmopolitanism and the Age of School Reform. Science, Education, and Making Society by Making the Child*. Routledge.

Popkewitz, T.S. (2004). Foreword. In G. Steiner-Khamsi (Ed.). *The Global Politics of Educational Borrowing and Lending,* (pp.vii-xi).Teachers College Press.

Popkewitz, T.S. (2000). *Educational Knowledge: Changing Relationships between the State, Civil Society, and the Educational Community*. State University of New York Press.

Prince, R. (2010). Policy transfer as an assemblage: Making policy for the creative industries in New Zealand. *Environment and Planning, A,42*, pp.169–186.

Rabinow, P. (2014). Assembling untimelinnes: Permanently and resistively. In J.Faubion (Ed.), *Foucault now: Current perspectives in Foucault studies*, (pp. 203–224). Polity Press.

Rinne, R., Zhou, G., Kauko, J., Normand, R., Medvedeva, A., & Santos, Í. (2019). Changing expertise and the state. In J. Kauko, R. Rinne, & T. Takala (Eds.). *Politics of Quality in Education. A Comparative Study of Brazil, China and Russia,* (pp.91–114). Routledge.

Rizvi, F. & Lingard, B. (2010). *Globalizing Education Policy*. 1st edition. Routledge.

Robertson, S.L. & Dale, R. (2015) Towards a 'critical cultural political economy' account of the globalizing of education. *Globalisation, Societies and Education, 13* (1), pp.149–170.

Robertson, S.L., & Dale, I.R. (2008). Researching education in a globalising era: beyond methodological nationalism, methodological statism, methodological educationism and spatial fetishism. In J. Resnik (Ed.), *The Production of Educational Knowledge in the Global Era,* (pp.19–32). Sense Publishers. http://www.bris.ac.uk/education/people/academicStaff/edslr/publications/15slr

Robertson, S.L. (2006). Absences and imaginings: the production of knowledge on globalization and education. *Globalisation, Societies and Education, 4*(2), pp. 303–318.

Rolland, L. (2023). 'I'm sure at some point we'll be switching': planning and enacting an interview language policy with multilingual participants, *Journal of Multilingual and Multicultural Development, 44* (8), pp. 702–717, DOI: 10.1080/01434632.2023.2199000

Sackett, D. L. (2000). *Evidence-based medicine: How to practice and teach EBM* (2nd ed.). Churchill Livingstone.

Sahlberg, P. (2016). The Global Education Reform Movement and Its Impact on Schooling. In K. Mundy, A. Green, B. Lingard, & A. Verger (Eds.), *The Handbook of Global Education Policy,* (pp.128–144). John Wiley & Sons.

Sanderson, I. (2006). Complexity, practical rationality and evidence-based policy-making. *Policy and Politics, 34*(1), 115–132.

Sassen, S. (2002). Spatialities and temporalities of the global: Elements for a theorization. In A. Appadurai (Ed.), *Globalization,* (pp. 260–278). Duke University Press.

Sassen, S. (2007). *Sociology of globalization*. W.W. Norton.

Sassen, S. (2013). When the global arises from inside the national. In T. Seddon & S. Levin (Eds.), *World yearbook of education 2013. Educators, professionalism and politics: Global transitions, national spaces and professional projects*, (pp. 27–41). Routledge.

Savage, G. C. (2020). What is policy assemblage? *Territory, Politics, Governance, 8*(3), pp. 319–335.

Seddon, T., McLeod, J. & Sobe, N.W. (2018). Reclaiming historical sociologies of education. In Mcleod, J., Sobe, N.W. (Eds.) *Uneven Space-Times of Education: Historical Sociologies of Concepts, Methods and Practices. World Yearbook of Education 2018*, pp. 1–15. Routledge.

Sellar, S., & Lingard, B. (2013). Looking east: Shanghai, PISA 2009 and thereconstitution of reference societies in the global education policy field. *Comparative Education, 49*(4), 464–485.

Shore. C. & Wright, S. (2015). Governing by numbers: audit culture, ranking and the new world order. *Social Anthropology, 23* (1), pp. 22–28.

Silova, I., Millei, Z., & Piattoeva, N. (2017). *Childhood and Schooling in (Post) Socialist Societies: Memories of Everyday Life*. Palgrave Macmillan. https://doi.org/10.1007/978–3-319–62791–5

Simola, H., Kauko, J., Varjo, J., Kalalahti, M. & Sahlström, F. (2017). *Dynamics in education politics: understanding and explaining the Finnish case.* Routledge.

Simola, H., Ozga, J., Segerholm, C., Varjo, J., & Normann Andersen, V. (2011). Governing by numbers: the rise of data in education. In J. Ozga, P. Dahler-Larsen, C. Segerholm, & H. Simola (Eds.), *Fabricating Quality in Education: Data and Governance in Europe,* (pp. 96–106). Routledge.

Sivesind, K. & Karseth, B. (2022). Introduction: A Comparative Network Analysis of Knowledge Use in Nordic Education Policies. In: B. Karseth, K. Sivesind, & G. Steiner-Khamsi (Eds.), *Evidence and Expertise in Nordic Education Policy: A Comparative Network Analysis,* (pp. 1–31). Palgrave Macmillan. DOI: https://doi.org/10.1007/978–3-030–91959–7

Skeggs, B. (1995) Introduction. In B. Skeggs (Ed.) *Feminist cultural theory. Process and production,* (pp. 1–28). Manchester University Press.

Smith, C. (2013). *Beyond Evidence-Policy in Public Health: The Interplay of Ideas.* Palgrave Macmillan.

Sobe, N.W. & Kowalzcyk, J.A. (2018). Context, entanglement and assemblage as matters of concern in comparative education research. McLeod, J., Sobe, N.W. (Eds.) *Uneven Space-Times of Education: Historical Sociologies of Concepts, Methods and Practices. World Yearbook of Education 2018*. Routledge. pp.197–204.

Sobe, N.W. & Kowalzcyk, J.A. (2014). Exploding the Cube: Revisioning "Context" in the Field of Comparative Education. *Current Issues in Comparative Education, 16*(1), pp. 6–12.

Sobe, N.W. & Kowalzcyk, J.A (2012). The problem of context in comparative education research. *ECPS Journal, 6*, pp. 55–74.

Soja, E. W. (2009). The city and spatial justice" [« La ville et la justice spatiale », traduction :Sophie Didier, Frédéric Dufaux*], justice spatiale | spatial justice | n° 01 septembre | september 20*. http://www.jssj.org/

Stanziola, J. (2012). Experts in search of expert power: Analysing CASE from an institutional perspective. *Cultural Trends, 21*(4), 290–298. https://doi.org/10.1080/09548963.2012.726791

Steiner-Khamsi, G. (2022). What is in a reference? Theoretically understanding the uses of evidence in education policy. In: B. Karseth, K. Sivesind, & G. Steiner-Khamsi (Eds.), *Evidence and Expertise in Nordic Education Policy: A Comparative Network Analysis*, Palgrave Macmillan, (pp. 33-58).DOI: https://doi.org/10.1007/978–3-030–91959–7

Steiner-Khamsi, G. & Gorur, R. (2019). Contextualizing "context". In R. Gorur, S. Sellar, & G. Steiner-Khamsi (Eds.), *Comparative Methodology in the Era of Big Data and Global Networks. World Yearbook of Education; No. 2019,* (pp. 165–167). Routledge.

Steiner-Khamsi G (2015) Foreword. In: Hamilton M, Maddox B and Addey C (Eds.) *Literacy as numbers: Researching the politics and practices of international literacy assessment regimes*, (pp.xi-xii). Cambridge University Press.

Steiner-Khamsi, G. (2014). Comparison and Context: The Interdisciplinary Approach to the Comparative Study of Education. *Current Issues in Comparative Education, 16*(2), pp. 34-42.

Steiner-Khamsi, G. (2012A). What is Wrong with the 'What-Went-Right' Approach? *European Educational Research Journal, 12* (1), pp. 20–33.

Steiner-Khamsi, G. (2012B). Understanding Policy Borrowing and Lending: Building Comparative Policy Studies. In G.Steiner-Khamsi and F.Waldow (Eds.). *World Yearbook of Education 2012: Policy Borrowing and Lending in Education*, (pp. 3–17). Routledge.

Stone, D. A. (2016). Quantitative analysis as narrative. In M. Bevir & R. A. W. Rhodes (Eds.), *Routledge handbook of interpretive political science,* (pp. 157–170). Routledge.

Søreide, G.E., Riese, H., & Hilt, L.T. (2021). 21st century skill and current Nordic educational reforms. In Pink, W. T. (Ed.) *Oxford Encyclopedia of School Reform*. Oxford University Press.

Takayama, K., & Lingard, B. (2021). How to Achieve a 'revolution': Assembling the subnational, national and global in the formation of a new, 'scientific' assessment in Japan. *Globalisation, Societies and Education, 19*(2), pp. 228–244. https://doi.org/10.1080/14767724.2021.1878016

Takayama, K. (2013). OECD, 'Key competencies' and the new challenges of educational inequality. *Curriculum Studies 45*(1), DOI:10.1080/00220272.2012.755711

Takayama, K. (2008). The politics of international league tables: PISA in Japan's achievement crisis debate. *Comparative Education, 44*, pp. 387–407. https://doi.org/10.1080/03050060802481413

Tanesini, A. (1994). Whose Language? In K. Lennon, & M. Whitford (Eds.), *Knowing the Difference: Feminist Perspectives in Epistemology,* (pp. 203–216). Routledge.

Tavory, I. (2020). Interviews and Inference: Making Sense of Interview Data in Qualitative Research. *Qualitative Sociology, 43*, pp. 449–465

Taylor, S., Rizvi, F., Lingard, B.& Henry, M. (1997) *Educational policy and the politics of change.* Routledge.

Telhaug, A. O., Mediås, A., & O., & Aasen, P. (2006). The Nordic Model in Education: Education as part of the political system in the last 50 years. *Scandinavian Journal of Educational Research, 50*(3), 245–283. https://doi.org/10.1080/00313830600743274

TENK. (2023). *Hyvä tieteellinen käytäntö ja sen loukkausepäilyjen käsitteleminen Suomessa*. [Good scientific practice and handling suspected violations of it in Finland]. Tutkimuseettisen neuvottelukunnan julkaisuja 2/2023.

Thrift, N. (2004). Movement-space: The changing domain of thinking resulting from the development of new kinds of spatial awareness. *Economy and Society, 33*(4), pp. 582–604.

Theisen, H., Hooge, E., & Waslander, S. (2016). Steering Dynamics in Complex Education Systems. An Agenda for Empirical Research. *European Journal of Education, 51*(4), 463–477. DOI: 10.1111/ejed.12187

Thompson, G., Sellar, S. & Buchanan, I. (2022). 1996: the OECD policy-making assemblage, *Journal of Education Policy, 37* (5), 685–704, DOI: 10.1080/02680939.2021.1912397

Thomson, P. & Kamler, B. (2010). It's been said before and we'll say it again – research is writing. In P.Thomson & Walker, M. (Eds.), *The Routledge Doctoral Student's Companion*, (pp.149–294). Routledge.

Trow, M. (2007). Reflections on the Transition from Elite to Mass to Universal Access: Forms and Phases of Higher Education in Modern Societies since WWII. In J.J.F. Forest, & P.G. Altbach (Eds), *International Handbook of Higher Education*. Springer International Handbooks of Education, vol 18, (pp. 243-280). Springer. https://doi.org/10.1007/978–1-4020–4012–2_13

Tröhler, D. (2023). The Nordic Education Model: Trajectories, Configurations, Challenges.In D. Tröhler, D., B. Hörmann, S. Tveit, S., & I. Bostad (Eds.), *The Nordic Education Model in Context: Historical Developments and Current Renegotiations*, (pp. 1–11). Routledge.

Tröhler, D. (2020) National literacies, or modern education and the art of fabricating national minds. *Journal of Curriculum Studies, 52*(5), pp. 620–635. https://doi.org/10.1080/00220272.2020.1786727

Tröhler, D. (2016). Educationalization of Social Problems and the Educationalization of the Modern World. In M.A. Peters (Ed.) *Encyclopedia of Educational Philosophy and Theory*, (pp. 698-703). Springer.

Törnberg, P., & Törnberg, A. (2019). Minding the gap between culture and connectivity: Laying foundations for a relational mixed methods social network analysis. In D. E. Froehlich, M. Rehm, & B. E. Rienties (Eds.), *Mixed methods social network analysis. Theories and methodologies in learning and education* (pp. 58–71). Routledge.

Uljens, M., & Rajakaltio, H. (2017). National curriculum development as educational leadership: A discursive and non-affirmative approach. In M. Uljens & R. Ylimaki (Eds.), *Bridging educational leadership, curriculum theory and didaktik. Educational governance research (Vol. 5),* (pp.411-474). Springer.

Valtioneuvoston asetus perusopetuslaissa tarkoitetun opetuksen valtakunnallisista tavoitteista ja tuntijaosta [Government Decree on the National Objectives for Education Referred to in the Basic Education Act and in the Distribution of Lesson Hours] (422/2012)

Verger, A. (2014). Why do Policy-makers Adopt Global Education Policies? Toward a Research Framework on the Varying Role of Ideas in Education Reform. *Current Issues in Comparative Education, 16* (2), pp.14–29.

Verger, A., Novelli. M., and Altinyelken, H.K. (2012). Global Education Policy and International Development: An Introductory Framework. In: A.Verger, M. Novelli, and H.K. Altinyelken (Eds.), *Global Education Policy and International Development: New Agendas, Issues and Policies*, (pp.3-32). Continuum.

Vibert, F.(2007). *The Rise of the Unelected. Democracy and the New Separation of Powers*. Cambridge University Press.

Waldow, F. & Steiner-Khamsi, G. (Eds.) (2019). *Understanding PISA's Attractiveness*. Bloomsbury.

Warburton, N. (2013, February 1). *Doreen Massey on Space [Audio podcast episode].* Social Sciences Bites. Social Science Space. https://www.socialsciencespace.com/2013/02/podcastdoreen-massey-on-space/

Wells, P. (2007). New Labour and evidence based policy making: 1997–2007. *People, Place & Policy Online, 1*(1), pp. 22–29.

Wimmer, A. & Glick Schiller, N. (2002). Methodological nationalism and beyond: nation-state building, migration and the social sciences. *Global Networks, 2*(4), pp.301–334.

Wiseman, A.W. (2010) The Uses of Evidence for Educational Policymaking: Global Contexts and International Trends. *Review in Education, 43*, pp.1–24.

Whitty, G. & Whisby, E. (2020). Evidence-Informed Policy and Practice in a 'Post-truth' Society. In Fan, G. & Popkewitz, T. (Eds.) *Handbook of Education Policy Studies. Values, Governance, Globalization, and Methodology, Volume 1,* (pp. 399–414). Springer.

Wollscheid, S., Stensaker, B., & Bugge, M. M. (2019). Evidence-informed policy and practice in the field of education: The dilemmas related to organizational design. *European Education, 51*(4), pp. 270–290. https://doi.org/10.1080/10564934.2019.1619465

Ydesen, C., Kauko, J., & Magnúsdottir, B.R. (2022). The OECD and the field of knowledge brokers in Danish, Finnish, and Icelandic education policy. In: B. Karseth, K. Sivesind, & Steiner-Khamsi, G. (Eds.) *Evidence and Expertise in Nordic Education Policy: A Comparative Network Analysis*, Palgrave Macmillan, (pp. 321-348).DOI: https://doi.org/10.1007/978–3-030–91959–7

Ydesen, C. (2019). The formation and workings of a global education governing complex. In C. Ydesen (Ed.), *The OECD's historical rise in education: The formation of governing complex,* (pp. 291–304). Palgrave Macmillan.

Zournazi, M. (2002). Navigating movements: An interview with Brian Massumi. In M. Zournazi (Ed.). *Hope: New Philosophies for Change,* (pp.210-243*)*. Pluto Press.

Appendices

Appendix 1. Documents analysed in the Finnish National Core Curriculum Reform in 2014

WP 2012	Tulevaisuuden perusopetus [Future Basic Education]
GP 2010	Perusopetus 2020 – yleiset valtakunnalliset tavoitteet ja tuntijako [Basic Education 2020: Common National Aims and Distribution of Lesson Hours]
GP 2002	Opinto-ohjauksen arviointi perusopetuksessa, lukiossa ja ammatillisessa koulutuksessa sekä koulutuksen siirtymävaiheissa [Evaluation of Student Counselling in Basic Education, Upper Secondary Schools, Vocational Education, and in Transition Phases of Education]
GP 2012	Onko laskutaito laskussa? Matematiikan oppimistulokset peruskoulun päättövaiheessa 2011 [Are Mathematical Skills in Decline? Mathematics Learning Results at the End of Basic Education in 2011]
GP 2012	Aihekokonaisuuksen tavoitteiden toteutumisen seuranta-arviointi 2010 [Evaluation of Achievement of Overarching Education Goals 2010]
GP 2010	Opettajat Suomessa 2010 [Teachers in Finland 2010]
GP 2010	Esi- ja perusopetuksen opetussuunnitelmajärjestelmän toimivuus [Evaluation of the Curriculum of Pre-School and Basic Education]
GP 2011	Liikunnan oppimistulosten seuranta-arviointi perusopetuksessa 2010. Koulutuksen seurantaraportit 2011:4 [Evaluation of Learning Results in Physical Education 2010. Educational Evaluations 2011:4]
GP 2012	Luonnontieteiden seuranta-arviointi [Evaluation of Natural Sciences]
GP 2012	Historian ja yhteiskuntaopin oppimistulokset perusopetuksen päättövaiheessa 2011 [Evaluation of Learning Results in History and Social Studies at the End of Basic Education 2011]

(Pizmony-Levy, O. & Baek, C., 2022, p. 65)

Appendix 2. Documents analysed in the Norwegian Knowledge Promotion Reform in 2016/2020

WP 2016	St.meld.nr. 28 (2015–2016): Fag – Fordypning – Forståelse – En fornyelse av Kunnskapsløftet [Report No. 28 to the Parliament: Subjects, In-Depth Learning – Understanding. A Renewal of the Knowledge Promotion Reform]
WP 2017	St.meld.nr. 21 (2016–2017): Lærelyst – tidlig innsats og kvalitet i skolen [Report No. 21 to the Parliament: Eager to Learn – Early Intervention and Quality in Schools]
GP 2003	NOU 2003:16 I første rekke. Forsterket kvalitet i engrunnopplæring for alle [In the First Row. Increased Quality Within a Basic Education System for Everyone]
GP 2007	NOU 2007:6 Formål for framtida. Formål for barnehagen og opplæringen [Objects Clause for Kindergarten and Primary and Secondary Education]
GP 2009	NOU 2009:18. Rett til læring [Students' Rights to Learning]
GP 2010	NOU 2010:7 Mangfold og mestring- Flerspråklige barn, unge og vaksne i opplæringssystemet [Diversity and Mastering. Multilingual Children, Young People and Adults in the Education System]
GP 2014	NOU 2014:7 Elevenes læring I fremtidens skole: Et kunnskapgrunnlag [Pupils' Learning in the School of the Future. A Knowledge Base]
GP 2015	NOU 2015:8 Fremtidens skole. Fornyelse av fag og kompetanser [The School of the Future. Renewal of Subjects and Competences]
GP 2015	NOU 2015:2 Å høre til. Virkemidler for et trygt psykososialt skolemiljø [About Belonging and a Safe Psycho-Social School Environment]
GP 2016	NOU 2016:14 Mer å hente – Bedre læring for elever med stort læringspotensiale [More to Gain – Better Learning for Students with Higher Learning Potential]

(Pizmony-Levy, O. & Baek, C., 2022, p. 66)

Appendix 3. Documents analysed in the Icelandic policy formation process at various times from 2013 to 2017

WP 2014	Hvítbók um umbætur í menntun [white paper on Education Reform]
WP 2017	Education for All in Iceland. External Audit of the Icelandic System for Inclusive Education
GP 2014	Review of Policies to Improve the Effectiveness of Resource Use in Schools: Country Background Report, Iceland.
GP 2015	Mat á framkvæmd stefnu um skóla án aðgreiningar. Skýrslastarfshóps [Evaluation of the Implementation of the Strategy of Inclusive Education. Report of a Workgroup]

(Pizmony-Levy, O. & Baek, C., 2022, p. 66)

Appendix 4. The Use of the OECD References in the Finnish Reform

Table 2 The Use of the OECD References in the Finnish Reform.

OECD reference	Source	Purpose of the source document
1092	1	policy design
1096	1	policy design
1094	1	policy design
1040	1	policy design
1762	66	policy design
1671	8	subject assessment
1099	1	policy design
1763	66	policy design
1672	8	subject assessment
1098	1	policy design
1286	1	policy design
1404	2	subject assessment
1091	1	policy design
1095	1	policy design
1405	2	subject assessment

Appendix 5. Informed Consent Form

Date: 17 March 2020

Are you interested in taking part in the research project "Tracing the Formation and Utilization of Evidence and Expertise in Nordic Education Policy"?

Because of your experience with the topics that we are exploring, we would like to invite you to participate in an interview related to the research project "Tracing the Formation and Utilization of Evidence and Expertise in Nordic Education Policy".

Our main purpose is to develop new insights about knowledge use and its implications in school reform policy within the Nordic region of Europe. This letter provides information about the project and asks for your consent.

Purpose of the project

The project is a sub-project to and derives its research questions from an empirical research project on evidence-use in Nordic school reform policy (POLNET), funded by the Norwegian Research Council (project number 283467). The project is a Nordic comparative collaboration.

It focuses in particular on how policy makers and experts in five Nordic countries make use of international, regional and national knowledge sources when setting reform agendas, creating policy options and formulating new policies for school reforms in their respective countries. By looking into the ways ministries or state agencies authorize knowledge sources and draw on evidence and expertise in policy making processes, the project aims to better understand how actors such as international organizations and national state agencies shape power relations, discourses, and decisions in school reform policy.

An overall purpose is to enable both policy researchers and experts to understand changes in the use of national, regional and international policy knowledge over the period 1988 – 2020 across five Nordic countries and determine shifts in references to systems and knowledge about "best practices" and "international standards". The POLNET project compares bibliometric data and make use of content analysis of white and green papers. The sub-project "Tracing the Formation and Utilization of Evidence and Expertise in Nordic Education Policy" helps interpreting results from the POLNET project by analysing data from expert interviews. This subproject will

help exploring similarities and differences in policy-making processes between the Nordic countries.

Who is responsible for the research project?

University of Oslo (UiO) is responsible for the POLNET project. Dr. Kirsten Sivesind, Associate Professor, UiO serves as the principle investigator and manages the project together with Berit Karseth, Professor, UiO, and Gita Steiner-Khamsi, Adjunct Professor (UiO). For the interview study, UiO serves as the data controller together with the University of Iceland by Associate Professor Berglind Rós Magnúsdóttir, Tampere University by Professor Jaakko Kauko, Linnaeus University, and Associate Professor Andreas Nordin, and Aalborg University by Professor Christian Ydesen. The research project involves senior and junior researchers and PhD candidates.

Why are you being asked to participate?

Because of your experience with the topics that we are exploring, we would like to invite you to participate in an interview. In 2020 we plan to conduct eighteen interviews with policy makers and experts engaged at the national or the Nordic level about the most recent school reforms. Our overall aim is to gather practical insights of those with relevant experience about knowledge use in policy-making processes over the last four years and of those who can identify shifts in reference use to international standards and/or best practices. We will put a particular focus on the Nordic dimension.

We have received contact details about you from official websites and/or by contacting the institution where have you are/have been employed or engaged in advisory committees. In cases where we had not access to public information about persons involved, we have made use of a snowball method, contacting a person because another informant has mentioned his or her name.

What does participation involve for you?

In the near future, Saija Volmari will contact you to set up an appointment for an interview (about 50 minutes to one and a half hours). We encourage you to participate or to indicate another time that is more convenient for you. The interview will include questions regarding your experience or knowledge of the National Curriculum of 2014. We hope to briefly explore topics such as the knowledge and expertise used in the Government Decree on the National Objectives (government decree 422/2012) and the influence of Nordic policy knowledge and

cooperation in this process. The results will help developing new insights into school reform policy and will identify key questions for further research in this area. We are willing on your request to send you a draft copy of our final report for suggestions or comments. We expect to present our final results in a format and medium accessible to an academic audience and readable for a diverse group of experts in the field of school reform policy.

Participation is voluntary

Participation in the project is voluntary. If you chose to participate, you can withdraw your consent at any time without giving a reason. All information about you will then be made anonymous. There will be no negative consequences for you if you chose not to participate or later decide to withdraw.

Your personal privacy – how we will store and use your personal data

We will only use your personal data for the purpose specified in this information letter. We will process your personal data confidentially and in accordance with data protection legislation (the General Data Protection Regulation and Personal Data Act).

We plan to record the interview, and the transcriptions will first be stored at digital devises used by the researchers and their assistants who conduct and transcribe the interview. Thereafter the data will be stored at secure servers provided by the universities. We will assure that your name and contact details are replaced with a code. The list of names, contact details and respective codes will be stored separately from the rest of the collected data. Any personal data will be deleted by the end of 2025.

We will avoid as best as possible to publish reports and articles where informants are recognizable. In cases where the informants have served within a prominent position, such as minister or deputy secretary, there is a chance that they will be recognized. If the informants in this case would like to check the citation, we will follow up by emailing the person. However, a general rule is to cite you anonymously.

What will happen to your personal data at the end of the research project?

The project is scheduled to end on the 31st of August 2025. At this date, all digital recordings will be deleted and personal data anonymized.

Your rights

So long as you can be identified in the collected data, you have the right to:

- access the personal data that is being processed about you
- request that your personal data is deleted
- request that incorrect personal data about you is corrected/rectified
- receive a copy of your personal data (data portability), and
- send a complaint to the Data Protection Officer or The Norwegian Data Protection Authority regarding the processing of your personal data

What gives us the right to process your personal data?

We will process your personal data based on your consent.

Based on an agreement with the University of Oslo, the Norwegian Centre for Research Data AS (NSD) has assessed that the processing of personal data in this project is in accordance with data protection legislation.

Where can I find out more?

If you have questions about the project, or want to exercise your rights, contact:

The institution responsible for the study, University of Oslo by the Project leader Kirsten Sivesind Email: Kirsten.sivesind@iped.uio.no

The University of Oslo Data Protection Officer: Roger Markgraf-Bye, by email: personvernombud@uio.no

NSD – The Norwegian Centre for Research Data AS, by email: (personverntjenester@nsd.no) or by telephone: +47 55 58 21 17.

Yours sincerely,

Kirsten Sivesind
Project Leader
University of Oslo

Saija Volmari
Doctoral Researcher
University of Helsinki

Consent form

I have received and understood information about the project" Tracing the Formation and Utilization of Evidence and Expertise in Nordic Education Policy" and have been given the opportunity to ask questions. I give consent:

- ☐ to participate in an interview
- ☐ for information about me/myself to be published in a way that I can be recognised (only in case you have had a prominent role, such as being a minister or a commission leader)– if applicable

I give consent for my personal data to be processed until the end date of the project, approximately end of 2025.

(Signed by participant, date)

Appendix 6. Interview guide

Table 3 Interview guide.

Introduction	
In our project we examine reform making processes in five Nordic countries. We compare school reforms for compulsory education in five Nordic countries where we ask about 1. Formal role and overall purpose: Who were involved in the process and what was your main responsibility and goals? 2. What was the substantial area of interest and which themes or issues did you emphasize? (norms, values and standards, accountability, content and competence, equity and equality, well-being) 3. Knowledge: What kind of knowledge did you take into account and from where did you access knowledge? 4. Process: How did you make use of knowledge when writing the reports, where there any deliberations on particular issues or any sources of conflicts and how were decisions finally made? 5. Implications – expectations about outcomes We follow the formal regulations and rules (GDPR) and handle the information based on a consent to do so. If we cite you and you can be identified due to your role, we will ask you for permission to do so (like a journalist).	
Formal role and responsibility	
Who were involved in the school reform project/commission? Please describe your role and your background	- Council/board/agency - Project - Commission - Committee
Policy realm and activities	
Please tell about the reform in general terms. What was your main responsibility?	
Substantial area of interest	

What was the substantial area of interest for you? Which themes or issues did you focus on?	(norms, values and standards, accountability, content and competence, equity and equality, well-being)
Meeting points	
Did you attend meetings, seminars, or conferences before or during your work at this committee/commission, which you considered relevant? If so – do you find any of this knowledge and information you gained in these occasions relevant for your work with the paper?	
Influential knowledge	
Which knowledge sources did you draw on in your conversations on this particular paper? Can you think of additional information you referred to in talks and discussions? Did you exchange knowledge with others? Did you experience any sources of conflict or concerns in your conversations on certain topics?	
Global, regional, and local contexts for knowledge production	
In our research project, we have examined reference lists. We discovered that there are relatively few references published in neighbouring countries what we call Nordic knowledge sources. Do you have any explanations? Do you remember any Nordic cooperation in the work of your paper(s) and subsequently any knowledge and information exchange during the process? How did knowledge and information meetings, seminars or conferences outside the Nordic region informed the processes?	- International - Regional - National
Authorization of references within the reports and policy papers	
How did you decide on which knowledge sources you finally took into account? How did you decide on which publications that should be included in the reference list? How did you decide on the format of this list and how you referenced documents within the papers?	
Implications	

Do you know how this paper and the follow up process had any implications?	- Political (parliamentary processes) - Programmatical (curricula, evaluation systems etc) - Practically (schools)

I

5

Evidence and Expert Power in Finnish Education Policy Making: The National Core Curriculum Reform

Saija Volmari, Jaakko Kauko, Juho Anturaniemi, and Íris Santos

Since the 1990s, national policy reforms have been increasingly more influenced by transnational actors and the global context (Rizvi & Lingard, 2010). International organizations have become particularly active players in setting policy direction on a national level (Morgan & Volante, 2016). For example, in the field of education, organizations such as the World Bank, the United Nations Educational, Scientific and Cultural Organization (UNESCO), and the Organisation for Economic

S. Volmari (✉)
University of Helsinki, Helsinki, Finland
e-mail: saija.volmari@helsinki.fi

J. Kauko • J. Anturaniemi
Tampere University, Tampere, Finland
e-mail: Jaakko.kauko@tuni.fi

Í. Santos
Tampere University, Tampere, Finland

University of Lisbon, Lisbon, Portugal
e-mail: iris.santos@tuni.fi

© The Author(s) 2022
B. Karseth et al. (eds.), *Evidence and Expertise in Nordic Education Policy*,
https://doi.org/10.1007/978-3-030-91959-7_5

Co-operation and Development (OECD) have been prominent in engaging in national education policy making (Mundy et al., 2016). Their instruments of assessment enable them to compare outcomes across countries, identify successful practices, and define quality standards that can serve as references for subsequent policy adjustments. In this way they contribute to setting the rules of the game through "governing by comparison" (Martens & Niemann, 2013, p. 317). At the same time, expert advice and evidence is widely sought by national policy actors as support for framing and legitimizing complex decisions. This has led to critical voices claiming for instance that the unelected actors have gained power that challenges the conventional decision-making processes (Viber, 2007) and that high-level strategic thinking may be outsourced from the national to the supranational level (Lawn et al., 2011).

Since the first Program for International Student Assessment (PISA) results were published in 2000, many have considered Finland a model of educational success. Indeed, the nation is widely used as a reference society (Bendix, 1978, as cited in Waldow, 2017; Waldow & Steiner-Khamsi, 2019) for standards of good practice by countries around the world, including other Nordic countries such as Norway (see, e.g., Sivesind, 2019), that are looking to improve their education performance. Although Finland has had a strong tradition of adopting state-led policies in education, the extent to which international organizations exercise their influence on the national level is a subject of debate in the Finnish context as well.

In this chapter we address the recurring debate in comparative education on the extent to which education is shaped by national or international influences and explore it from the point of view of expertise and evidence. Our focus is on *determining the kind of evidence Finland draws on when endeavoring to improve its schools and learning outcomes and identifying whose expertise is valued most as evidence in this process*. As an example of such a reform, we examine the policy-making process that produced the 2014 National Core Curriculum of Finland. We discuss our findings in light of previous research on education policy making in Finland to elucidate the two opposing strands of the debate—one stressing the state-centeredness of education policy making in Finland and the other claiming that transnational organizations and international expertise and

evidence are gradually gaining more leverage in the field. To overcome the dichotomy between the two opposing forces—national and international—we view global as something that is constructed within the local (Massey, 2005; Sassen, 2007, 2013). We use Larsen and Beech's (2014) suggestion to focus on "networks, connections and flows" (p. 75) in researching educational transfer and Eyal's (2019) idea of expertise as located in relationships and networks between individuals. Our interpretative framework and our choice of data and methods of analysis stem from the definition of evidence by Paul Cairney (2016, p. 3): "Evidence is an argument or assertion backed by information." Based on these theoretical starting points, we examine the bibliometric references as information that supports the arguments in the most prominent policy documents in the reform process.

The chapter begins with a discussion on the meaning and role of evidence and expertise in current policy development, with a focus on the context of education policy and politics. We then elaborate on the context of Finnish education policy making and the argumentation in the relevant literature. Next, we present the research design and results. Finally, we conclude the chapter by discussing the findings of our research in relation to our interpretative framework and presenting our conclusions.

Evidence and Expertise in Education Policy Making

As the world has become increasingly interconnected and the issues facing policymakers more complex and global, government authorities worldwide have grown to rely extensively on expert advice to inform the decisions they must make. Seeking outside opinions has become second nature to policy making in modern democracies that strive to perform well (Holst & Molander, 2019; Maasen & Weingart, 2009; Moore, 2017). At the same time, the pace and scope of information flow is constantly escalating. It has become increasingly challenging, for instance, to maintain a working knowledge of the vast and increasing amount of

scientific output. Consequently, one key task of the experts and expert organizations today is to select the knowledge relevant to address the data and information needs of politicians and policymakers (Stanziola, 2012; Wolscheid et al., 2019).

The role of knowledge in policy making and politics has become more visible due to the rise of the evidence agenda (Wolscheid et al., 2019, p. 273). Politicians and policymakers are expected to base their decisions not on intuition and beliefs but on objective and reliable information—in other words, actual evidence. The role of experts in providing this knowledge has become central. Contrary to popular belief about what constitutes expertise, Eyal (2019) argued that expertise is not a set of skills or knowledge an individual or a group possesses; instead, expertise depends on outside recognition, which qualifies what experts do as "expertise." To be perceived as an expert, one needs to master "the disciplinary knowledge system composed of abstractions and general rules" (Eyal, 2019, p. 31) and possess an ability to explicate in line with these rules and within this knowledge system on issues familiar to them and on new challenges and problems. In short, according to Eyal (2019), expertise is a "historically specific way of talking" and "doubly external," meaning that the expert status and its disciplinary knowledge and practice are derived independently of the expert (p. 31), and it is constructed in networks and connections between individuals (Eyal, 2013).

In today's world, expert knowledge is often expected to be based on scientific knowledge or, as Holst and Molander (2017, p. 238) noted, on knowledge that is validated by scientific norms and procedures. Although to be recognized as an expert one must operate according to scientific norms of knowledge production, knowledge and expertise for the use of policy making are not necessarily provided only by academics. One can gain an expert position through practical experience as well. For example, civil servants with extensive work experience in a certain field may have gained knowledge and skills that are considered "expertise" in that field (Holst & Molander, 2019; Krick et al., 2019).

Due to complexity and global interconnectivity, governments frequently refer to expertise to legitimize and frame political decisions (Moore, 2017, p. 3). Legitimization can be the most significant motive for choosing the evidence, particularly in the case of unpopular reform

proposals (Maasen & Weingart, 2009; Steiner-Khamsi, 2003, 2004). As a legitimization instrument, numbers have become particularly seductive. Their power lies in their appearing neutral, apolitical, and objective. Still, any political narrative can be attached to them (Stone, 2016). Another appealing feature of numbers and quantitative indicators is that they make complex realities and processes appear simple and comparable (Espeland, 2015, p. 61).

The increasing demand for evidence-based policy making and expert knowledge based on numbers is a familiar phenomenon in education policy making as well. Wiseman (2010, p. 1) stated that evidence-based policy making in education has become particularly popular since education became closely tied with the economic, social, and political status of modern nation-states. This has led to raised expectations related to education system outcomes. Measurable results are expected as a revenue for the public expenditure invested in education. Evidence-based policy making, according to Wiseman (2010, p. 1), rests on two underlying assumptions: (1) education is abstract and universal and (2) empirical evidence is an efficient indicator of knowledge and learning. These two notions combined have created the belief that one can find what works well in one context and apply it to another (Wiseman, 2010).

The popularity of international large-scale student assessments stems from this kind of thinking and supports its further development (Gorur, 2016). The knowledge and evidence used in education policy making are frequently, in fact, globally comparative and quantitative. Prior research demonstrates the influence international organizations, such as the OECD and its international assessment instruments (e.g., PISA), have on nation-states' policy making in the field of education (e.g., Costa, 2011; Grek, 2009; Nieman & Martens, 2018; Sellar & Lingard, 2013; Takayama, 2008; Waldow & Steiner-Khamsi, 2019). The views researchers take on this development vary. There are those who praise traveling reforms as proof of policy learning and implementation of best practices, and those who view this development as a sign of global players imposing their own standards on national governments (Steiner-Khamsi, 2012, pp. 3–4). The most critical voices have raised concerns about high-level strategic thinking being outsourced from the national to the

transnational level and to supranational expert organizations (Lawn et al., 2011, p. 18).

Both Doreen Massey (2005) and Saskia Sassen (2007, 2013) proposed that we view national or local and international or global not as separate or layered. They argued that both local and global are constantly under construction and that the space of global/international is, in fact, produced within the place of local/national. Massey (2005, p. 9) suggested thinking of space as something constituted in both local and global and in the interaction between these two and as something fluid and in a constant state of becoming. Applying these thoughts to the field of comparative education, Larsen and Beech (2014, p. 85) claimed that much of the previous research on education transfer was based on a static view of transfer, "as if ideas are produced in one site and then received in another context." On the contrary, Larsen and Beech (2014) described education transfer as the "movement of educational knowledge across space" (p. 76) and suggested that comparative education research adopt a theoretical framework that focuses on researching networks and connections within which educational knowledge is constructed and flowing. Returning back to expertise as a historically specific way of speaking and constructed in interactions and interrelations as proposed by Eyal (2013, 2019), he further proposed focusing on networks as well. He claimed that to understand the way expertise is constructed and functions, we need to shift our attention from individuals to networks. Inspired by these discussions, we built our analysis on interactions between local and global and on networks of knowledge, individuals, and organizations.

Curriculum Process in the National and International Context

Our case in point, the curriculum reform of 2014, was framed by the national policy process. The main actors of the process were the Finnish government and the National Agency for Education, a government agency working under the auspices of Finland's Ministry of Education and Culture. The Finnish government politically steered the process, as it

is responsible for the general objectives of the National Core Curriculum and the distribution of lesson hours. This is legislated in a government decree on objectives and distribution of hours, which also delegates the power to decide on the core curriculum to the National Agency for Education (Valtioneuvoston asetus 422/2012). The decree was issued based on a white paper. The political nature of the process became apparent when the last National Core Curriculum reform was rebooted after the draft of the general objectives and distribution of lesson hours was met with objections inside the center-right coalition government in 2010 (Siekkinen, 2017). Subsequently in 2012, the right-left coalition government that followed began work on National Core Curriculum reforms. The main governance organ in the process, the National Agency for Education, is responsible for curriculum planning and works together with the Ministry of Education and Culture to determine specific objectives and content for subject-specific and cross-curricular themes (Kujala & Hakala, 2020). In this work, evidence was obtained from green papers and experts. Open consultations can also be part of the process. The National Agency for Education was responsible for coordinating a cooperative process with a broad selection of stakeholders to draft the latest curriculum (Kujala & Hakala, 2020). For instance, the working group for green paper 1, the 2010 document "Basic Education 2020," organized five seminars specifically targeted to certain expert groups; received feedback from two-thirds of the Finnish municipalities; heard from researchers, experts, and stakeholders on different occasions; and considered the survey responses of over 60,000 children and young people in which they shared their thoughts on what was good about the school as it existed and what changes they would like to see in the future.

Following completion of the final draft of the latest curriculum, on 22 December 2014 the National Agency for Education issued the new curriculum. Since August 2016, grades 1–6 have followed the new curriculum; grades 7–9 began implementation in 2017–2019. Representatives for the National Agency for Education introduced the new curriculum as built around "competences needed in society and working life" that aimed to change "the content of teaching, pedagogy and school practices" (Halinen et al., 2014). According to Uljens and Rajakaltio (2017), the new curriculum follows the competence-based idea and key

competencies promoted by the OECD. However, the competence orientation is less radical in comparison to curricula of other countries, such as Norway (Mølstad & Karseth, 2016; Sivesind et al., 2016).

The policy development process for Finland's National Core Curriculum has been in flux. The main structural change occurred in the 1990s. During a period of decentralization, legislation was changed to increase the autonomy of municipalities on education issues (Kuntalaki 365/1995, 1995; Laki peruskoululain muuttamisesta 707/1992, 1992). School inspections were gradually abolished (Varjo et al., 2016), and legislative restrictions on school choice were again tightened in 1998 (Ahonen, 2003, pp. 180–192; Seppänen, 2006, pp. 66–71). As a result, the curriculum has a dual character in steering. On one hand, the National Core Curriculum is the main content steering instrument in Finnish comprehensive education policy, and schools are legally bound to follow it. The Basic Education Act (628/1998, §30) states that "an enrolled pupil shall be entitled to teaching according to the curriculum." In practice, the National Core Curriculum obligates the provider of education (in most cases, municipalities) to include its central aims as part of the educational program. On the other hand, broad degrees of freedom are at play in the implementation of the curriculum. The providers of education and schools can draw on the National Core Curriculum to create their own curricula. Importantly, apart from formal complaints, no direct methods for monitoring the implementation of the curriculum exist, which leaves much autonomy for teachers and schools.

The recurring debate in comparative education addressed in this volume is the extent to which education is national or international. The degree of divergence or isomorphic convergence of national policies (e.g., Meyer et al., 1997; Steiner-Khamsi, 2010, p. 332) and the calls for reshaping or deconstructing the understanding of these nation-based categories (e.g., Kettunen, 2011; Robertson et al., 2002; Werner & Zimmermann, 2006) are examples of this debate. The central questions circle around defining the role of the state and whether it is a central player in the globalizing world. The corpus of Finnish research on influences in education policy is characterized by the tension between these two arguments existing at the same time but pulling in opposite directions. The analysis of these influences in education policies has focused

on the relation of Finland to international organizations. The first argument sees the international influences important in shaping the national policies, finding the OECD especially important in this role; however, no clear agreement has been reached on how and what influence is channeled. The second argument supports the state-centeredness of Finnish policy making.

In relation to the argument supporting the influence of international organizations, interviews with top officials in the Ministry of Education and Culture indicate the close relationship the Ministry shares with the OECD (Niukko, 2006). In higher education, major reforms have frequently been preceded by an OECD investigation (Kallo, 2009). In some instances, the influence is thought to be rather direct, as Rinne and Simola (2005, p. 16) pointed out that quality discourses are "directly from the arsenal of the EU and the OECD," and Kauko and Varjo (2008) have observed Finland riding in the OECD's slipstream. Then again, Kallo (2009, p. 357) understood the influence to be more epistemic: the OECD forms an epistemic community, the power of which is derived from deeply rooted networks. Moisio (2014) noted that in higher education policy making, Finland has resorted to a "policy spin," where national goals are fed back into the Finnish system via the EU. Naumanen and Rinne (2008) demonstrated that the national goals are not always far from European or OECD objectives. Therefore, the first argument is characterized by the main deduction of a high-functioning and rather technically flavored network, ending in influences floating to national policy space.

In relation to the argument for state-centeredness, a historical overview reveals how intensively the state became involved in education. In simplified terms, the grand change in nineteenth-century education in Finland was its secularization from the church-led system, while the primary change in the twentieth century was the nationalization and municipalization of education (Joutsivuo, 2010; Leino-Kaukiainen & Heikkinen, 2011). The state-centered tradition in Finnish education politics is related to the strong state institutions created in the post-war period that are responsible for education and to the strong dependency that educational institutions and providers have to them. State-centeredness is aligned with what has been recognized as the ideal of the

universalistic Nordic welfare state (Esping-Andersen, 1990). The build-up of the education system was a state-centered process in which comprehensive schools were planned as a large societal project to support equality and economic growth (e.g., Ahonen, 2003), while at the same time public higher education was subject to regionalization and massification (e.g., Lampinen, 2003). Simultaneously, the state institutions grew in importance. The post-war "post-office size" (Kivinen et al., 1990, p. 39) Ministry of Education and Culture budget sector became the third largest among the ministries. The strong role of the state was slightly reorganized at the time of the global and Nordic (Dovemark et al., 2018) management reforms, where public governance in Finland was reformed to a strategic and managerial style (Autio, 1997; Temmes, 1996). As part of the international trends, the 1990s brought a move toward decentralization and deregulation, which changed the steering system dramatically and gave responsibility to the municipalities (Simola et al., 2013). However, the Ministry of Education and Culture is still recognized as a central if not the most central power hub in Finnish education policy making. Research has documented its role as a bureaucratic-led and independent actor rather than a politically steered organization (Kivinen et al., 1990, p. 103; Lampinen, 2003, pp. 162–200; Lehtisalo & Raivola, 1999, pp. 122–123). However, research has also identified that the general national policy steering tends to supersede the education-based policy steering signals (Kallunki et al., 2015; Seppänen et al., 2019), which does not diminish the argument of a state-centered system but, rather, supports it. In sum, the second argument sees the long-term growth of the state system.

The analysis of the policy process in Finland has revealed the links between the state bodies and the international organizations. The two partly opposing lines of argumentation provided by previous research on Finnish education policy and politics gives a rich picture of a system that traditionally has been strongly state led, yet has also become part of a global policy space and network from which influences float to national policy space. However, this picture is still rather dichotomous and at least partly based on the idea of ideas flowing from one level (international and global) to another (national or local), and previous research has revealed also more interactive processes (Centeno, 2017). Our aim is to

surpass this dichotomy and to complement the picture by focusing on networks of evidence and expertise, as Larsen and Beech (2014) and Eyal (2013, 2019) proposed. In the process we aim to discover, along the line of Massey (2005) and Sassen (2007, 2013), how global is constructed in local and vice versa.

Research Design

Research Question and Methods of Analysis

In this chapter we set out to explore how evidence was used in Finland's 2014 reform of the National Core Curriculum and whose evidence was most highly valued in this process. As the starting point for our methodological approach, we chose to apply Paul Cairney's (2016) definition of evidence as "an argument or assertion backed by information (p. 3)". We share the view that Gita Steiner-Khamsi presented in Chap. 2 that the importance of examining bibliometric references is crucial since these references in the policy documents are used to "provide legitimacy to the evidence which the author has provided in the document." Hence, references can be seen as validation of evidence, so we applied a bibliometric network analysis as our first method in this chapter. In the bibliometric network analysis, we focused on the 677 bibliometric references used in the ten core policy documents that constituted our database. These references were analyzed with the software programs UCINET and Netdraw, which generated descriptive statistics and an illustrative figure of knowledge networks. The statistics were used to examine what kinds of evidence (location of the publication; type of publication) and expertise (author of the publication) were used in the reform. The visualization of the networks was used to illustrate the political process, the knowledge network, and evidence base of the reform.

We double-checked and complemented these findings with a content analysis of the ten documents selected for investigation. We inspected the ten core documents, looking for any references to the OECD and PISA that appeared within the text but were not references to actual sources

nor included in the reference list. Finally, we examined each of the most cited OECD documents and identified the policy documents in which they were used.

To determine whose evidence was most highly valued in this reform, we additionally investigated the organizations that employed the most prominent authors at the time they authored these documents. The top 18 of the most cited individual authors were selected and their literary works and the year of publishing that were found in the database were listed chronologically, after which their employers at the time that they wrote each text were researched using a variety of sources, such as other publications from the same year that had the author's position and organization cited, social media profiles, publications and newsletters from the employing organizations, newspaper articles, worker profile pages of universities and other organizations, and even biographies in the case of some of the more experienced authors. In addition, we analyzed the titles of all 677 publications in our sample and singled out the titles of the publications of the most cited authors for closer analysis.

Selection of Data

As there is not a universally agreed upon concept of a white paper (WP) or a green paper (GP), an interpretation was made that a WP constitutes a draft for new legislation, while GPs provide background information. Our focus of analysis for the main document was a WP produced by the ministry-assigned working group. The WP "Future Basic Education" identified the general national objectives, presented a proposal for renewed distribution of lesson hours, and suggested the necessary decree changes for the Government Statute on the National Education Objectives Referred to in the Basic Educational Act and the Distribution of Lesson Hours in Basic Education (Valtioneuvoston asetus 422/2012, 2012). From the in-text citations typical of the Ministry of Education and Culture documents, several documents were discovered, nine of which were identified as GPs suitable for analysis.

Our criteria for determining relevance primarily consisted of three factors: (1) the document provided relevant information and suggestions for

the curriculum reform, (2) the document contained a list of references or references in footnotes, and (3) the document was related to the WP. The input of data was completed in two stages: the primary input stage, during which data from the selected sources were coded, and the secondary stage, during which the coded data were cleaned and corrected. Some subsequent data-cleaning was completed later when the need arose, but those changes were minor compared to the second stage and did not alter the original findings.

The coding process followed the original plans for creating a comparable database. In the Finnish coding process, some clarifications had to be made, especially when categorizing the documents as "book," "report," "journal article," or "government-issued report." The categorization of document types was problematic for two reasons: the National Agency for Education conducts plenty of scientific research on its own and in conjunction with certain Finnish universities, most of which is then published under the agency's name, making it difficult to distinguish the level of government involvement at times. Second, many faculty in Finnish universities have their own publication series where studies conducted by the members of the faculty are presented, often in a book form. Many of these studies are peer-reviewed, making the exact categorization of the publication series difficult. These issues were solved as follows: any studies published by the National Agency for Education were coded as a "government-issued report," and the publication series were coded as either a "book" or a "report," depending on the form of the publication, as they are not academic journals in the strictest sense.

Listed in Table 5.1 are all the documents selected for the analysis. All the selected documents were written in Finnish; their English translations follow the document names in parentheses. Throughout the rest of this chapter, tables with Finnish words and names have their translations or explanations in parentheses for the ease of readability.

Table 5.1 Documents chosen for analysis

Doc ID	Document title
66 (WP)	*Tulevaisuuden perusopetus* [Future Basic Education]
1 (GP)	*Perusopetus 2020—yleiset valtakunnalliset tavoitteet ja tuntijako* [Basic Education 2020: Common National Aims and Division of Teaching Hours]
2 (GP)	*Opinto-ohjauksen arviointi perusopetuksessa, lukiossa ja ammatillisessa koulutuksessa sekä koulutuksen siirtymävaiheissa* [Evaluation of Student Counseling in Basic Education, Upper Secondary Schools, Vocational Education, and in Transition Phases of Education]
3 (GP)	*Onko laskutaito laskussa? Matematiikan oppimistulokset peruskoulun päättövaiheessa 2011* [Are Mathematical Skills in Decline? Math Learning Results at the End of Basic Education in 2011]
4 (GP)	*Aihekokonaisuuksen tavoitteiden toteutumisen seuranta-arviointi 2010* [Evaluation of Achievement of Overarching Education Goals 2010]
5 (GP)	*Opettajat Suomessa 2010* [Teachers in Finland 2010]
6 (GP)	*Esi- ja perusopetuksen opetussuunnitelmajärjestelmän toimivuus* [Evaluation of the Curriculum of Pre-School and Primary Education]
7 (GP)	*Liikunnan oppimistulosten seuranta-arviointi perusopetuksessa 2010. Koulutuksen seurantaraportit 2011:4* [Evaluation of Learning Results in Physical Education 2010. Educational Evaluations 2011:4]
8 (GP)	*Luonnontieteiden seuranta-arviointi* [Evaluation of Natural Sciences]
9 (GP)	*Historian ja yhteiskuntaopin oppimistulokset perusopetuksen päättövaiheessa 2011* [Evaluation of Learning Results in History and Social Studies at the End of Basic Education 2011]

Notes: English translation of document names in parentheses. WP = White Paper; GP = Green Paper

Results

Evidence Base of the Reform

The evidence base of the reform consisted of 677 referenced documents. Based on prior research, both international and Finnish, we expected to see significant use of international sources for policy evidence. Based on the prominence of the OECD in producing quantitative comparative data, the organization was anticipated to be especially prominent, and the evidence in this policy process was expected to be extensively drawn from PISA and other large-scale student assessments. On the contrary, however, the Finnish data indicate a strong state involvement and

concentration of expertise in state organizations, namely, the Ministry of Education and Culture (that produced the WP), and especially, the National Agency of Education (that produced or commissioned the GPs in our sample). Table 5.2 depicts the distribution of references according to the location of publication (domestic, regional/Nordic, international) and the type of publication (report, book, journal article, governmental, other).

Of all references included in the ten policy documents, 76% are domestic, that is, published in Finland, and 22% are international, while only 1.6% were published in other Nordic countries, or regionally. In three of the ten policy documents, all references used are domestic. An analysis of the type of publications reveals that very little scientific evidence was used in the process. The percentage of journal articles is very low, only 9.45% in total. Almost no scientific evidence in the strictest sense of the definition was used in the WP (document ID 66), as the percentage of peer-reviewed academic journal articles is 0%. However, it is important to remember that, as explained previously (see "Selection of Data" section), the categorization of publications in the Finnish case was challenging. On one hand, the National Agency of Education publishes books that are written or co-authored by universities and researchers and comply with scientific norms. On the other hand, universities publish book series that are not peer-reviewed in the strictest sense but, nevertheless, are academic publications. As we chose to follow the strictest possible interpretation of peer-reviewed academic publications (categorized as "journal articles"), any studies published by the National Agency for Education were coded as "government-issued report," and the publication series were coded as either a "book" or a "report," depending on the form of the publication, as they are not academic journals in the strictest sense.

The network analysis reveals that the evidence base of the WP (in the bottom left hand corner of Fig. 5.1, document ID 66) to a great extent is based on the evidence base of GP 1 "Basic Education 2020," shown in the middle of the figure. In fact, the evidence base of the GP appears to be more central and versatile in this reform than that of the WP itself. It can also be concluded that in this reform, GP 1 "Basic Education 2020" serves as an "intermediary" (Lubienski, 2019), as it connects the

Table 5.2 Reference distribution

		Location			Type of document				
ID	Total	Domestic	Regional	Int'l	Report	Book	Journal article	Gov't	Other
66	19	78.95%	0.00%	21.05%	21.05%	0.00%	0.00%	78.95%	0.00%
1	310	74.19%	1.61%	24.19%	10.32%	32.90%	6.13%	29.35%	21.29%
2	125	91.20%	1.60%	7.20%	8.00%	36.00%	2.40%	32.80%	20.80%
3	14	100.00%	0.00%	0.00%	14.29%	0.00%	0.00%	78.57%	7.14%
4	103	66.99%	2.91%	30.10%	5.83%	45.63%	10.68%	27.18%	10.68%
5	27	100.00%	0.00%	0.00%	14.81%	48.15%	0.00%	25.93%	11.11%
6 2	24	70.83%	4.17%	20.83%	0.00%	25.00%	12.50%	50.00%	12.50%
7	54	57.41%	0.00%	42.59%	7.41%	16.67%	38.89%	24.07%	12.96%
8	26	84.62%	0.00%	15.38%	7.69%	42.31%	7.69%	23.08%	19.23%
9	27	100.00%	0.00%	0.00%	40.74%	7.41%	3.70%	48.15%	0.00%
Total	6771	76.04%	1.63%	22.34%	10.93%	33.83%	9.45%	27.92%	17.87%

[a]References that are cited by multiple sources are only counted once [2] One of the publications did not have a clear location of publication and could not be categorized as domestic, regional, or international

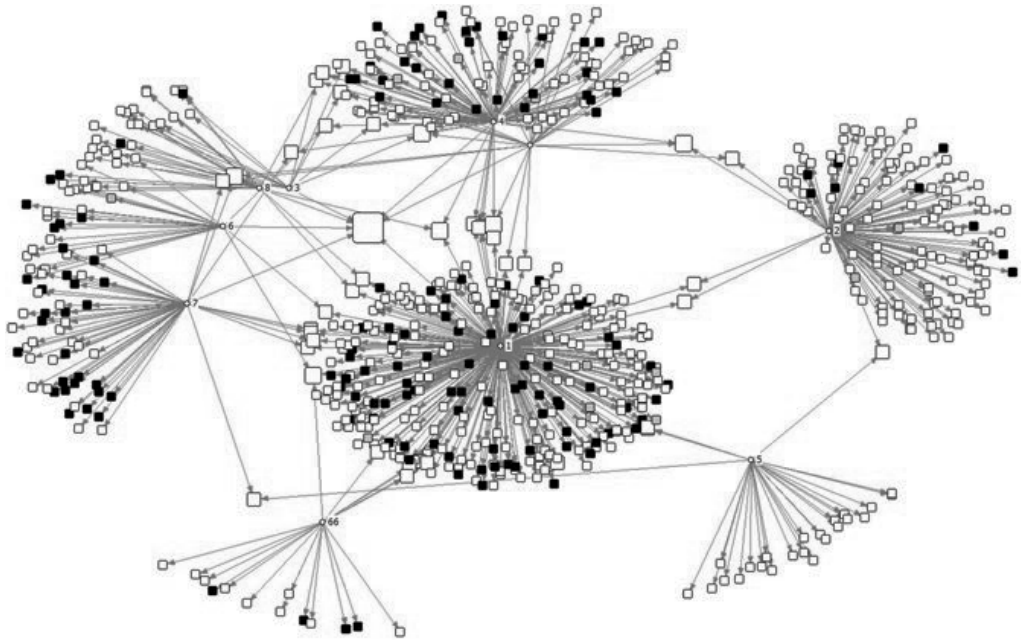


Fig. 5.1 Complete network structure. (*Notes*: Regional: gray, domestic: white, international: black; *source*: Circle; node size=in-degree centrality)

knowledge network of the WP to that of the other GPs. The link strengths are illustrated in Fig. 5.2.

The WP (66) is linked only to two other documents, GP 1 "Basic Education 2020" (1) and the GP 6 (6) "Evaluation of the curriculum of pre-school and primary education." The link between the curriculum evaluation GP and the WP is rather weak, indicating they share some of the same sources but not many. However, the link between the "Basic Education 2020" GP and the WP is strong, indicating they share largely the same sources and, hence, the same evidence base. To summarize, the evidence base of this reform appears to be predominantly domestic, and the WP and GP 1 share a significant portion of their evidence base. Furthermore, GP 1 serves as an intermediary and is the most central document in the network.

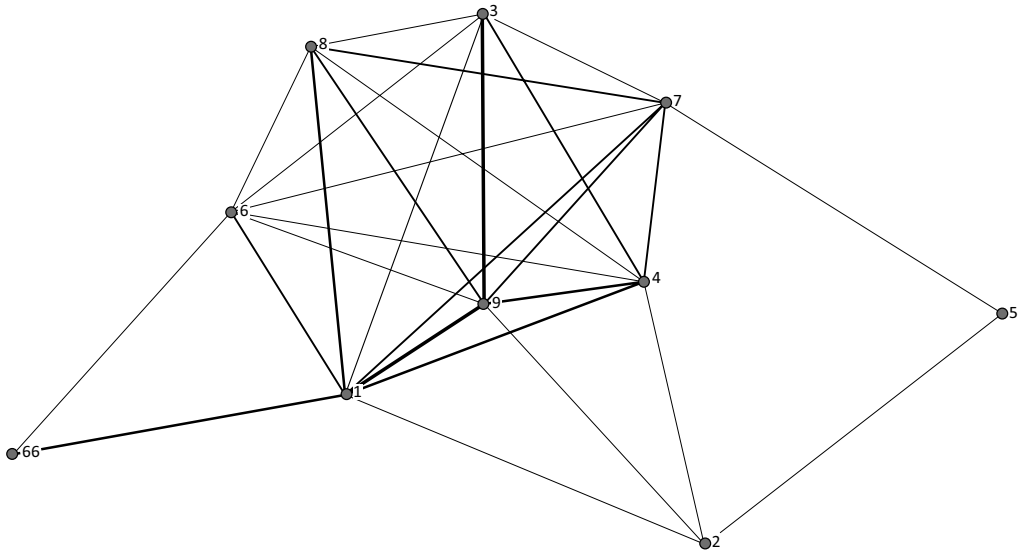


Fig. 5.2 Source document network. (*Note*: Link strength is based on the number of references shared by two sources)

Table 5.3 Most cited publishers (top ten)

Publisher	Count
Opetushallitus [National Agency for education]	170
Opetus- ja kulttuuriministeriö [Ministry of Education and Culture]	57
Jyväskylän yliopisto [University of Jyväskylä]	55
Helsingin yliopisto [University of Helsinki]	32
Taylor & Francis	16
PS-Kustannus (Publisher)	15
Organisation for Economic Co-operation and Development [OECD]	14
WSOY (Publisher)	11
Valtioneuvosto [Finnish Government]	9
Tilastokeskus [Statistics Finland]	8
Valtion painatuskeskus [State Printing Center]	8
TOTAL	395

Whose Evidence Is Most Highly Valued?

As discussed previously, the evidence base of this reform appears to be overwhelmingly domestic. A closer look at the publishers illustrates that the evidence base is not just domestic, but it is also exceedingly state-centered. Table 5.3 provides a list of the top ten most cited publishers.

Of the 395 publications on the most cited publishers list, 43% (170) were published by the National Agency of Education, and 14.5% (57) were published by the Ministry of Education and Culture. Therefore, of the documents published by the top ten most cited publishers, 57.5% (227) were published by one of these two government organizations. If the documents published by the Finnish government (9) and the State Printing Center (8) are added, the total amount published by a state/government organization rises to 244 publications, which is 62% of the documents published by the top ten most cited publishers. This indicates a strong state involvement in the curriculum reform process and demonstrates that the evidence base of this reform was national, state-centered, and to a great extent, self-referential in nature.

On this list, the University of Jyväskylä ranks third and the University of Helsinki ranks fourth. As described in Chap. 11 (Ydesen, Kauko, Magnúsdóttir), these two universities hold a specific and special position in Finnish education policy making. The Finnish Institute of Educational Research at the University of Jyväskylä and the Centre for Educational Assessment at the University of Helsinki have been, in turns, contracted by the Ministry of Education and Culture to implement PISA. The Finnish Institute of Educational Research has also been responsible for the OECD Teaching and Learning International Survey (TALIS). They are both main hubs for OECD data expertise in Finland. In this particular curriculum reform, they were also among the main publishers of the evidence used in the reform. They are the only universities in this top ten list, indicating that it is not so much the scientific evidence but the evaluation expertise, and in particular, the OECD data expertise, that was valued in this reform. Hence, it seems that the evidence used in this reform is domestic and state-centered, and it is particularly assessment and evaluation results that were valued as evidence. A closer look at the most cited authors further strengthens this argument (see Table 5.4).

As on the list of the top ten most cited publishers, the National Agency of Education and the Ministry of Education and Culture occupy the two top positions on the list of the top ten most cited authors. Both are referenced as authors almost three times as often as, for example, the OECD. Even individual authors, like Jakku-Sihvonen, a former employee of the National Agency of Education, are referenced almost as many

Table 5.4 Most cited authors

Author	Count
Opetushallitus [National Agency for Education]	45
Opetusministeriö/Opetus- ja kulttuuriministeriö [Ministry of Education and Culture]	38
Organisation for Economic Co-operation and Development [OECD]	15
Lappalainen, H.-P.	13
Jakku-Sihvonen, R.	12
Uitto, A.	11
Eduskunta [Finnish Parliament]	9
Nupponen, H.	9
Vuorinen, R.	9
Lavonen, J.	8
Mattila, L.	8
Telama, R.	8
Välijärvi, J.	8
Valtioneuvosto [Finnish Government]	8
Kupari, P.	7
Silverström, C.	7
Junttila, N.	6
Kasurinen, H.	6
Lairio, M.	6
Metsämuuronen, J.	6
Arinen, P.	5
Atjonen, P.	5
Heikinaro-Johansson, P.	5
Houtsonen, L.	5
Kari, J.	5
Linnakylä, P.	5
Mehtäläinen, J.	5
Nummenmaa, A. R.	5
Puhakka, E.	5
Rantanen, P.	5
Valkonen, S.	5
Vauras, M.	5

Note: Cutoff point: minimum five times

times as the OECD. Such individual authors can be seen as top experts in this particular reform but possibly also in the field of Finnish education policy in general. A closer look at the background of these top experts reveals that many of them were, at the time they authored the documents that were referenced in this policy process, employed by the National Agency of Education (5) or by the two universities that traditionally work

closely with the Agency—the University of Jyväskylä (6) and the University of Helsinki (6).

This demonstrates that the Ministry of Education and Culture and the National Agency of Education used, for the most part for this reform, evidence produced within their organizations or by the organizations they have a close relation with. This indicates that the policy evidence in this reform was largely self-referential and the policy process firmly steered by national government organizations. These findings also highlight the strong expert position and power of the National Agency of Education in the field of education policy and politics in Finland.

On the basis of these findings, it would be easy to conclude that policy making in Finland is, indeed, state-centered, the evidence base predominantly domestic, and the influence of international evidence and transnational organizations trivial. However, a closer look at the policy documents in our sample tells a slightly different story.

Firstly, although the OECD amounts to only 3% of the publications in the ranking of the top ten most cited publishers, and in the ranking of most cited authors it has 14 publications amounting to only 0.05%, it is important to note in which of the ten core policy documents these OECD documents were used.

The OECD references appear mainly in the WP and GP 1 "Basic Education 2020." The GP 1 was originally intended to be a WP, as explained in more detail earlier in "Curriculum Process in the National and International Context" in this chapter. Though the OECD references are not used in all of the policy documents in our sample, and the OECD documents are cited far less frequently than domestic references, OECD references are used in the policy documents that were most influential in terms of policy design and selection of the actual content of the curriculum reform. Thus, one can state that the OECD was, in fact, a significant component in the evidence base for this reform and that the OECD evidence was considered valuable.

Secondly, earlier research as referred to previously in this chapter has demonstrated the influence of large-scale student assessments (e.g., PISA) and the transnational organizations behind them in the national level of education policy making. These organizations and their standardized tests promote, in particular, a focus on skills, student achievements, and

evaluation of outcomes. In our sample, all GPs, apart from GP 1 "Basic Education 2020," are evaluations of some sort. Five are national assessments of learning outcomes. Moreover, 77 documents in our database (according to their titles) address topics related to evaluation or are evaluation reports of different subject areas and skills. It does seem that what was valued most as evidence in this reform are evaluations of skills and outcomes, indicating the evaluation and assessment culture promoted by the OECD does have an influence in Finnish policy making as well.

Thirdly, a content analysis of these eight GPs reveals that references to PISA are sometimes used in the text, even though no actual source is given as a reference in the text or in the list of references. On the other hand, the references may be to publications of Finnish experts and not directly to the publications by the OECD. This can be seen in GP 3, an evaluation on mathematics skills. Paragraph 1.3 in this report is dedicated to PISA results. In the rest of the report, the OECD is mentioned five times in the whole document, "OECD-countries" are mentioned five times, and PISA receives 24 mentions—19 in the text and 5 in the references. PISA is used as evidence within the text throughout this national evaluation report, but the references used pertaining to PISA results or the OECD are domestic references. In other words, the references come from three domestically produced and published documents, one by the Ministry of Education and Culture and two by the PISA experts of the University of Jyväskylä.

In addition, more findings must be considered when discussing the role and influence of the OECD and the evaluation culture it promotes. A significant portion of the publications of the most cited authors are national evaluation reports or reports written based on either national or international assessments. For instance, authors Lappalainen and Mattila are very high up on the list of most published authors. The six publications for which Lappalainen was the first or only author concern the national evaluations of learning outcomes in Finnish language as the mother tongue and in literature. The publications with Mattila as first author discuss national evaluations of learning outcomes in mathematics. This indicates that evaluation expertise and evidence especially were valued in this reform. Finally, one specialized form of this kind of expertise is the ability to interpret and translate OECD data so that it fits the

national policy context and needs. Among the most cited authors are for instance, Välijärvi, Kupari, and Arinen, each of whom belongs to this group of experts, their cited publications being predominantly Finnish language reports on PISA results.

Discussion

Our analysis of the evidence used in the curriculum reform 2014 reveals a strong tendency to use not only domestic evidence, but evidence provided by the two most powerful state organizations in the landscape of Finnish education policy making: the Ministry of Education and Culture and the National Agency for Education. These two organizations hold a strong, legally established position as the most prominent expert organizations in Finnish policy making in terms of comprehensive education and the National Core Curriculum. In the curriculum reform of 2014, they produced most of the nine core policy documents according to their mandate; the remaining documents were commissioned by the National Agency for Education. The working groups consisted, to a great extent, of the civil servants of either the Ministry of Education and Culture or the National Agency for Education, although the working group for "Basic Education 2020" from 2010 included representatives of main political parties and the most prominent stakeholder organizations as well. In addition, the bibliometric analysis of the cited references demonstrates that the working groups behind these policy papers chose predominantly to include evidence coming from within these two organizations as references in their reports, or alternatively, documents provided by organizations that have a strong and extended relationship with these two organizations as the contracted institutions for implementing PISA in Finland.

Our findings suggest, however, that there is more to the story. Though we found that the evidence used in the curriculum reform of 2014 was predominantly domestic and self-referential, this finding does not paint a correct picture of the influence of transnational actors, particularly the OECD. The content analysis revealed that PISA was referred to in the key policy documents, but sometimes without a bibliometric reference to

the OECD or PISA. In addition, a significant part of the references categorized as domestic in our sample were, in fact, reports on the PISA results written by Finnish authors and published in Finland. It seems the OECD data and, particularly, PISA indicators were, indeed, used as evidence in this reform, but this influence was filtered through domestic experts and expertise so that in the bibliometric analysis it appears mostly as domestic evidence.

The OECD data in this reform were especially used in the two most influential papers in terms of actual policy design: the WP and GP 1, which, when drafted, was intended as a WP but was discarded after the political power changed from the center-right to right-left. This indicates that the importance of the OECD and its international assessment instruments cannot be measured merely by looking at the number of references used in the policy documents. In the case of the curriculum reform of 2014, it seems that the OECD data and references came into play particularly in the policy documents that carried the most weight in the official policy design. This may indicate that the OECD evidence was used primarily to legitimize the policy recommendations and design, but this theory would need to be researched further. Our results, however, support the ideas of Deborah Stone (2016) and Wendy Espeland (2015) that numbers appear objective and apolitical, making them particularly appealing to policymakers. Sometimes these numbers from different evaluation reports come from within the local and national context and other times from the global and international context. Nevertheless, the hierarchization of evidence Gita Steiner-Khamsi discusses in Chap. 2 is undeniably evident in our example of an education reform as well.

In terms of expertise, what seemed to count in the main reform documents was, in fact, expertise in evaluation and assessment. The evidence that was valued was not necessarily scientific, but it was predominantly empirical. Though we did not specifically focus on narratives attached to numbers, it became clear to us that the preference in this reform was for a certain kind of evidence. The information used was to a large extent empirical evaluation data, partly stemming from the OECD and its PISA indicators. This is very much in line with Wiseman's (2010) claim that the evidence agenda in education is based on an underlying assumption that empirical evidence is an efficient indicator of knowledge and

learning. However, it was often only after the empirical data was filtered through the expertise of the core national actors that the data became policy evidence. The international data were many times filtered through Finnish officials' publications or by Finnish institutions.

Holst and Molander (2019) claimed that expertise does not necessarily have to be scientific. It can also be built on professional knowledge gained through long working experience in the field. The experts providing (most cited authors) and selecting (members of the working groups and the most cited authors) evidence in this reform were both scientists and civil servants with extensive experience in the field. What they frequently had in common, however, was expertise in assessing learning outcomes or in interpreting the results of large-scale student assessments. Our findings indicate that the ability to select, interpret, and translate this kind of data so that they fit the national context is what gives specific national actors the authority to speak with the authority of an expert. Most had expertise in explicating evaluation data, either national or international. Hence, the historically specific way of talking that Eyal (2019) referred to appears, in this case, to be the ability to speak numbers. The double externality of expertise (Eyal, 2019) in this process is evident in the fact that this particular form of expert talk was combined with the already established expert position of the individual authors as representatives of the most prominent power hubs in Finnish education policy making and politics. In fact, our results illustrate that expertise in education policy in Finland is highly concentrated in a few organizations that work closely together. It is this expert position that appears to give these organizations and their most prominent experts rather sovereign power to determine what constitutes policy evidence.

We began our chapter with a discussion on the role of the state in Finland's education policy making and whether the influence of international organizations has increased to the point that high-level expertise (and national decision-making along with it) is outsourced to the transnational level. Our research has demonstrated that education policy making, at least at the comprehensive education level in Finland, is primarily in the hands of two state organizations—the Ministry of Education and Culture and the National Agency for Education. We found no evidence of the transnational level overriding national expertise. In fact, the

national players appeared to be a powerful filter between the global and local. Although part of the evidence was produced on the transnational level (particularly by the OECD), the selection of evidence for policy decisions was carried out on the national level and by domestic experts. Also, part of the expertise of the national players consisted of explicating international evidence so that it fit the national context. The case we examined indicates that the international or global has the power to produce evidence but the national or local has the power to select the evidence and adjust it to meet the national needs. In fact, the type of evidence appeared to be more important than where the evidence originated from (local or global level). Both national and international evidence were used in this reform, but the key trait of the evidence was that it largely comprised empirical evaluation data. Similarly, the ability to "speak empirical evidence" seemed to be a key characteristic of the experts involved. This could include both domestic and international evidence, but the role of national experts in selecting, translating, and possibly even modifying the evidence produced by global players remained central in the process. This indicates that much like Larsen and Beech (2014) suggested, in the current era of global education transfer, the layered approach of researching comparative education no longer applies. Educational knowledge, as proposed by Larsen and Beech (2014), moves across the global space and through globally connected experts and expert organizations.

Conclusions

In this chapter we set out to investigate what kind of evidence the reform of the Finnish 2014 National Core Curriculum drew on and whose evidence was most highly valued in the process. We aimed to answer this question with a bibliometric network analysis, complemented with content analyses of the ten policy documents in our sample. Our database consisted of 677 cited references in these documents. Our starting point was the recurring debate in comparative education regarding the extent to which education is "national" or "international" and the tension of the two main arguments related to this debate in the Finnish research corpus.

We built our interpretative framework around the concept of expertise as a historically specific way of talking, doubly external, and constituted in networks and connections between individuals, as theorized by Gil Eyal (2019), and around the discussion of the interplay between global and local in comparative education research (Larsen & Beech, 2014) inspired by Doreen Massey (2005) and Saskia Sassen (2007, 2013). Our main methods were bibliometric network and qualitative content analyses.

At first glance, the state-centeredness appeared evident, as most evidence fell into the category of "domestic" in the bibliometric network analysis. A closer look revealed that reform was, in fact, based on both domestic and international evaluation evidence. The expert power throughout the process was, nevertheless, firmly held in the hands of a rather small, domestic network of experts. Their power appears to lie mainly in two areas: (1) the power to select the information relevant for policy evidence (as evidence is defined by Cairney, 2016) and the ability to explicate empirical evaluation data to cater domestic needs, as our findings suggest that "the historically specific way of talking" (Eyal, 2019, p. 31) that is needed for recognition of true expertise equates to speaking the language of evaluations and numbers; and (2) their relationship to either the Ministry of Education and Culture or the National Agency for Education, as these experts were either employed by these two most influential organizations in Finnish education policy or were working for one of the institutions traditionally closely linked to these organizations through their special role administrating and interpreting OECD's PISA results.

Although international evidence was used in the process, our findings do not support the most critical predictions that high-level expertise is being outsourced to the transnational level. At least in this reform process, the Ministry of Education and Culture stayed firmly in the steering wheel as a major hub of education policy expertise in Finland. Even the change in political power during the curriculum reform had little influence on the reform led by the Ministry and its civil servants. With the new government, the curriculum reform stayed its course, and the work continued with the once discarded policy document as the basis, regardless of the political changes that surrounded it. Though the process was state led, our findings do not support unanimously the claim for

state-centeredness, either. Much of the evidence, particularly in the most influential policy documents in terms of policy design, came from the OECD. Additionally, the expert position in the process was frequently based on expertise in explicating transnational evidence.

All in all, our findings indicate that the two layers of local and global are not separate or distinct but interconnected and intertwined. One gains its power from the other. Policy evidence may, in fact, function both as a legitimation tool for reform and as the source of strengthening expert power. In the process it may not be the state itself that is the central player in education policy, although it officially leads it. Much power may also be found working through and in the networks of experts. The experts are often national but they draw their expertise from the networks based on both local and global knowledge and connections. In the globalized world these networks cannot be traced back to one place but instead play out their influence in the global policy space that is constructed only partly within the national.

Acknowledgments The authors would like to thank Elina Kuparinen (University of Tampere) for her extensive work in identifying and coding the bibliometric references, and Dr. Chanwoong Baek (University of Oslo) for providing us with the figures and tables used in this chapter.

References

Ahonen, S. (2003). *Yhteinen koulu: Tasa-arvoa vai tasapäisyyttä? [Common School: Equality or Leveling Off?]*. Vastapaino.

Autio, V.-M. (1997). *Opetusministeriön historia VII. Vakiintuneisuudesta uusien muotojen etsimiseen [History of the Ministry of Education VII. From stability to finding new forms]*. Opetusministeriö.

Cairney, P. (2016). *The politics of evidence-based policymaking*. Palgrave Macmillan.

Centeno, V. G. (2017). *The OECD's educational agendas—Framed from above, fed from below, determined in interaction. A study on the recurrent education agenda*. Peter Lang.

Costa, E. (2011). *O 'Program for International Student Assessment' (PISA) como instrumento de regulação das politicas educativas [The 'Programme for*

International Student Assessment (PISA) as regulation instrument in education policy]. [Doctoral dissertation]. Instituto de Educação—Universidade de Lisboa.

de Marchi, G., Lucertini, G., & Tsoukiàs, A. (2016). From evidence-based policy-making to policy analytics. *Annals of Operations Research, Springer Verlag, 236*(1), 15–38. https://doi.org/10.1007/s10479014-1578-6. hal-01510889

Dovemark, M., Kosunen, S., Kauko, J., Magnúsdóttir, B., Hansen, P., & Rasmussen, P. (2018). Deregulation, privatisation and marketisation of Nordic comprehensive education: Social changes reflected in schooling. *Education Inquiry, 9*(1), 122–141.

Espeland, W. (2015). Narrating numbers. In R. Rottenburg, S. E. Merry, S. J. Park, & J. Mugler (Eds.), *The world of indicators. The making of governmental knowledge through quantification* (pp. 56–75). Cambridge University Press.

Esping-Andersen, G. (1990). *The Three Worlds of Welfare Capitalism*. Princeton University Press.

Eyal, G. (2013). For a sociology of expertise: The social origins of the autism epidemic. *American Journal of Sociology, 118*(4), 863–907.

Eyal, G. (2019). *The crisis of expertise*. Wiley.

Gorur, R. (2016). Seeing like PISA: A cautionary tale about performativity of international assessments. *European Educational Research Journal, 15*(5), 598–616.

Government Decree 422/2012 Valtioneuvoston asetus perusopetuslaissa tarkoitetun opetuksen valtakunnallisista tavoitteista ja perusopetuksen tuntijaosta [National objectives for education referred to in the basic education act and in the distribution of lesson hours]. (2012).

Grek, S. (2009). Governing by numbers: The PISA effect. *Journal of Education Policy, 24*(1), 23–37.

Halinen, I., Kauppinen, E., Sinko, P., Jääskeläinen, L., & Holappa, A-S. (2014, January 25). *Opetussuunnitelma opettajille. Mikä muuttuu ja miksi? [Curriculum for teachers. What changes and why?]* [Presentation]. EDUCA. https://docplayer.fi/7046583-Opetussuunnitelmasta-opettajille-mika-muuttuu-ja-miksi.html

Holst, C., & Molander, A. (2017). Public deliberation and the fact of expertise: Making experts accountable. *Social Epistemology, 31*(3), 235–250.

Holst, C., & Molander, A. (2019). Epistemic democracy and the role of experts. *Contemporary Political Theory, 18*(4), 541–561.

Joutsivuo, T. (2010). Papeiksi ja virkamiehiksi [Becoming Priests and Civil Servants]. In J. Hanska & K. Vainio-Korhonen (Eds.), *Huoneentaulun maailma. Kasvatus ja koulutus Suomessa keskiajalta 1860-luvulle* (pp. 112–183). SKS.

Kallo, J. (2009). *OECD Education Policy: A Comparative and Historical Study Focusing on the Thematic Reviews of Tertiary Education.* Finnish Educational Research Association.

Kallunki, J., Koriseva, S., & Saarela, H. (2015). Suomalaista yliopistopolitiikkaa ohjaavat perustelut tuloksellisuuden aikakaudella [Arguments Guiding Finnish University Policy in the Era of Performance]. *Kasvatus ja Aika, 9*(3), 117–133.

Kauko, J., & Varjo, J. (2008). Age of indicators: Changes in the Finnish education policy agenda. *European Educational Research Journal, 7*(2), 219–231.

Kettunen, P. (2011). The National Welfare State as transnational historical construction. In K. Petersen & P. Kettunen (Eds.), *Beyond the welfare state models* (pp. 16–40). Edward Elgar.

Kivinen, O., Rinne, R., & Mäntyvaara, J. (1990). Yliopiston toiminnalliset mekanismit ja muuttuva korkeakoulupolitiikka [Functional mechanisms of the university and changing higher education policy]. In O. Kivinen & R. Rinne (Eds.), *Korkeakoulutus tutkimuskenttänä Koulutussosiologian tutkimusyksikkö. Tutkimusraportteja 1* (pp. 93–109). Turun yliopisto.

Krick, E., Christensen, J., & Holst, C. (2019). Between 'scientization' and a 'participatory turn'. Tracing shifts in the governance of policy advice. *Science and Public Policy, 46*(6), 927–939. https://doi.org/10.1093/scipol/scz040

Kujala, T., & Hakala, L. (2020). Curriculum (Finland). In J. Kauko & I. Menter (Eds.), *Bloomsbury education and childhood studies*. Bloomsbury Publishing.

Kuntalaki [Act on Municipalities] 1995, 365/1995. (1995, March 17). Retrieved December 14, 2018, from https://www.finlex.fi/fi/laki/alkup/1995/19950365

Laki peruskoululain muuttamisesta [Act on Amending the Comprehensive School Act] 1992, 707/1992. (1992, August 3). Retrieved December 14, 2018, from https://www.finlex.fi/fi/laki/alkup/1992/19920707

Lampinen, O. (2003). *Suomen koulutusjärjestelmän kehitys [The Development of the Education System]* (3rd ed.). Gaudeamus.

Larsen, M. A., & Beech, J. (2014). Replacing the old spatial empires of the mind. *European Education, 46*(1), 75–94. https://doi.org/10.2753/EUE1056-4934460104

Lawn, M., Rinne, R., & Grek, S. (2011). Changing spatial and social relations in education in Europe. In J. Ozga, P. Dahler-Larsen, C. Segerholm, &

H. Simola (Eds.), *Fabricating quality in education. Data and governance in Europe* (pp. 11–1e8). Routledge.

Lehtisalo, L., & Raivola, R. (1999). *Koulutus ja koulutuspolitiikka 2000-luvulle [Education and education policy and politics to the 21st century]*. WSOY.

Leino-Kaukiainen, P., & Heikkinen, A. (2011). Yhteiskunta ja koulutus [Society and Education]. In A. Heikkinen & P. Leino-Kaukiainen (Eds.), *Valistus ja koulunpenkki. Kasvatus ja koulutus Suomessa 1860-luvulta 1960-luvulle* (pp. 16–33). SKS.

Lubienski, C. (2019). Advocacy networks and market models for education. In M. P. do Amaral, G. Steiner-Khamsi, & C. Thompson (Eds.), *Researching the global education industry* (pp. 69–86). Palgrave.

Maasen, S., & Weingart, P. (2009). *Democratization of expertise? Exploring novel forms of scientific advice in political decision-making*. Springer.

Martens, K., & Niemann, D. (2013). When do numbers count? The differential impact of the PISA rating and ranking on education policy in Germany and the US. *German Politics, 22*(3), 314–332.

Massey, D. (2005). *For space*. SAGE Publications.

Meyer, J. W., et al. (1997). World society and the nation-state. *American Journal of Sociology, 103*(1), 144–181.

Moisio, J. (2014). *Understanding the significance of EU higher education policy cooperation in Finnish higher education policy*. Tampere University Press.

Mølstad, C. E., & Karseth, B. (2016). National curricula in Norway and Finland: The role of learning outcomes. *European Educational Research Journal, 15*(3), 329–344. https://doi.org/10.1177/1474904116639311

Moore, A. (2017). *Critical elitism. Deliberation, democracy and the problem of expertise*. Cambridge University Press.

Morgan, C., & Volante, L. (2016). A review of the organisation for economic cooperation and Development's international education surveys: Governance, human capital discourses, and policy debates. *Policy Futures in Education, 14*(6), 775–792.

Mundy, K., Green, A., Lingard, B., & Verger, A. (2016). *The handbook of global education policy*. Wiley.

Naumanen, P., & Rinne, R. (2008). Eurooppalainen koulutuspolitiikka ja Suomen linjaukset [The European Politics of Education and Finnish Policies]. In R. Rinne, L. Jõgi, R. Leppänen, M. Korppas, & K. Klemelä (Eds.), *Suomalainen ja virolainen koulutus ja EU:n uusi koulutuspolitiikka* (pp. 274–306). Turun yliopiston kasvatustieteiden tiedekunnan julkaisuja A:208.

Nieman, D., & Martens, K. (2018). Soft governance by hard fact? The OECD as a knowledge broker in education policy. *Global Social Policy, 18*(3), 267–283. https://doi.org/10.1177/1468018118794076

Niukko, S. (2006). *Yhteistyötä ilman riskejä? OECD:n rooli Suomen koulutuspolitiikassa [Cooperation at no Risk? The Role of the OECD in Finnish Education Policy]*. Turun yliopisto.

Perusopetuslaki 628/1998 [Basic Education Act]. (1998, August 21).

Rinne, R., & Simola, H. (2005). *Koulutuksen ylikansalliset paineet ja yliopistojen uusi hallinta [Supranational pressures and new governance of universities]*. Tiede & Edistys, 1/2015.

Rizvi, F., & Lingard, B. (2010). *Globalizing education policy*. Routledge.

Robertson, S. L., Bonal, X., & Dale, R. (2002). GATS and the education service industry: The politics of scale and global reterritorialization. *Comparative Education Review, 46*(4), 472–495.

Sassen, S. (2007). *Sociology of globalization*. W.W. Norton.

Sassen, S. (2013). When the global arises from inside the national. In T. Seddon & S. Levin (Eds.), *World yearbook of education 2013. Educators, professionalism and politics: Global transitions, national spaces and professional projects* (pp. 27–41). Routledge.

Sellar, S., & Lingard, B. (2013). Looking east: Shanghai, PISA 2009 and the reconstitution of reference societies in the global education policy field. *Comparative Education, 49*(4), 464–485.

Seppänen, P. (2006). *Koulunvalintapolitiikka perusopetuksessa: Suomalaiskaupunkien koulumarkkinat kansainvälisessä valossa [School-choice policy in comprehensive schooling—School markets of Finnish cities in the international perspective]*. Research in Educational Sciences 26. Finnish Educational Research Association.

Seppänen, P., Rinne, R., Kauko, J., & Kosunen, S. (2019). The use of PISA results in education policy-making in Finland. In F. Waldow & G. Steiner-Khamsi (Eds.), *Understanding PISA's attractiveness: Critical analyses in comparative policy studies* (pp. 137–159). Bloomsbury.

Siekkinen, K. (2017). *Koulutuksellisen tasa-arvon diskurssit ja toimijat peruskoulun tuntijakouudistuksessa [Educational equality discourses and actors' reform of the distribution of lesson hours in comprehensive school]*. [Doctoral dissertation]. University of Jyväskylä.

Simola, H., Rinne, R., Varjo, J., & Kauko, J. (2013). The paradox of the education race: How to win the ranking game by sailing to headwind. *Journal of Education Policy, 28*(5), 612–633.

Sivesind, K. (2019). Nordic reference societies in school reforms in Norway: An examination of Finland and the use of international large-scale assessments. In F. Waldow & G. Steiner-Khamsi (Eds.), *Understanding PISA's attractiveness. Critical analysis in comparative policy studies* (pp. 89–108). Bloomsbury.

Sivesind, K., Afsar, A., & Bachmann, K. E. (2016). Transnational policy transfer over three curriculum reforms in Finland: The constructions of conditional and purposive programs (1994–2016). *European Educational Research Journal, 15*(3), 345–365. https://doi.org/10.1177/1474904116648175

Stanziola, J. (2012). Experts in search of expert power: Analysing CASE from an institutional perspective. *Cultural Trends, 21*(4), 290–298.

Steiner-Khamsi, G. (2003). The politics of league tables. *Journal of Social Science Education*, Retrieved November 29, 2017, from http://www.jsse.org/2003-1/tables_khamsi.htm

Steiner-Khamsi, G. (Ed.). (2004). *The global politics of educational borrowing and lending*. Teachers College Press.

Steiner-Khamsi, G. (2010). The politics and economics of comparison. *Comparative Education Review, 54*(3), 323–342.

Steiner-Khamsi, G. (2012). Understanding policy borrowing and lending. Building comparative policy studies. In G. Steiner-Khamsi & F. Waldow (Eds.), *Policy borrowing and lending. World yearbook of education 2012* (pp. 3–17). Routledge.

Stone, D. A. (2016). Quantitative analysis as narrative. In M. Bevir & R. A. W. Rhodes (Eds.), *Routledge handbook of interpretive political science* (pp. 157–170). Routledge.

Takayama, K. (2008). The politics of international league tables: PISA in Japan's achievement crisis debate. *Comparative Education, 44*, 387–407. https://doi.org/10.1080/03050060802481413

Temmes, M. (1996). Hallintopolitiikan rakennedoktriinit [Structural doctrines of governance policy]. *Hallinnon tutkimus, 15*(2), 90–109.

Uljens, M., & Rajakaltio, H. (2017). National curriculum development as educational leadership: A discursive and non-affirmative approach. In M. Uljens & R. Ylimaki (Eds.), *Bridging educational leadership, curriculum theory and didaktik. Educational governance research* (Vol. 5). Springer.

Varjo, J., Rinne, R., & Simola, H. (2016). *Arvioida ja hallita: Perään katsomisesta informaatioohjaukseen suomalaisessa koulupolitiikassa [To Evaluate and Rule: From Looking After to Information Steering in Finnish Education Policy]*. Finnish Educational Research Association.

Viber, F. (2007). *The rise of unelected*. Cambridge University Press.

Waldow, F. (2017). Projecting images of the 'good' and the 'bad school': Top scorers in educational large-scale assessments as reference societies. *Compare: A Journal of Comparative and International Education, 47*(5), 647–664.

Waldow, F., & Steiner-Khamsi, G. (Eds.). (2019). *Understanding PISA's attractiveness. Critical analysis in comparative policy studies*. Bloomsbury.

Werner, M., & Zimmermann, B. (2006). Beyond comparison: 'Histoire Croisée' and the challenge of reflexivity. *History and Theory, 45*(1), 30–50.

Wiseman, A. W. (2010). The uses of evidence for educational policymaking: Global contexts and international trends. *Review of Research in Education, 34*, 1–24.

Wolscheid, S., Stensaker, B., & Bugge, M. M. (2019). Evidence-informed policy and practice in the field of education: The dilemmas related to organizational design. *European Education, 51*(4), 270–290.

Open Access This chapter is licensed under the terms of the Creative Commons Attribution 4.0 International License (http://creativecommons.org/licenses/by/4.0/), which permits use, sharing, adaptation, distribution and reproduction in any medium or format, as long as you give appropriate credit to the original author(s) and the source, provide a link to the Creative Commons licence and indicate if changes were made.

The images or other third party material in this chapter are included in the chapter's Creative Commons licence, unless indicated otherwise in a credit line to the material. If material is not included in the chapter's Creative Commons licence and your intended use is not permitted by statutory regulation or exceeds the permitted use, you will need to obtain permission directly from the copyright holder.



II

12

Regional Policy Spaces, Knowledge Networks, and the "Nordic Other"

Saija Volmari, Kirsten Sivesind, and Jón Torfi Jónasson

Two core beliefs that have helped promote evidence-based policymaking in education are that school knowledge is abstract and universal and that "empirical evidence is an efficient indicator of knowledge and learning" (Wiseman, 2010, p. 1). In fact, these beliefs have popularized the *what-went-right* or *best practices* approach in education policy planning. The what-went-right approach implies that it is possible to empirically measure students' learning in ways that produce generalized knowledge and that these transferrable features enable policymakers and others to apply findings across a variety of contexts. This view on the transfer of

S. Volmari (✉)
University of Helsinki, Helsinki, Finland
e-mail: saija.volmari@helsinki.fi

K. Sivesind
Department of Education, University of Oslo, Oslo, Norway
e-mail: Kirsten.Sivesind@iped.uio.no

J. T. Jónasson
University of Iceland, Reykjavík, Iceland
e-mail: jtj@hi.is

© The Author(s) 2022

B. Karseth et al. (eds.), *Evidence and Expertise in Nordic Education Policy*,
https://doi.org/10.1007/978-3-030-91959-7_12

knowledge partly explains why, for example, the Programme for International Student Assessment (PISA) has developed into a global project, supported by a large number of stakeholders (Addey et al., 2017).

However, previous research has questioned the smooth transition of empirical evidence across countries and continents as well as the universal character of the findings and recommendations produced by international organizations (Bieber, 2016). First, the receptiveness to international comparisons and the uptake of global scripts and schemes in policymaking depends on national and local traditions and cultures. Steiner-Khamsi et al. (2020) demonstrated that policymakers under the jurisdiction of the state are selective in their application of evidence from international large-scale studies. Second, for the type of transfer associated with PISA and similar studies, it is a common belief that policy transfer occurs and works best when educational systems are similar in terms of the challenges they are facing (Steiner-Khamsi, 2013, pp. 20–21). Moreover, it is assumed to be more likely that neighboring countries will be more receptive to the same solutions on common problems, than countries in other regions or continents. Based on these arguments, neighboring countries select the same policy solutions since they are committed to the same culture or have established similar systems and models to warrant legal rights on behalf of the citizens. For this reason, neighboring states may reflect similar temporal and geographic patterns of policy spread (Dolowitz, 2018).

However, to date, researchers have reached no consensus about the role that regional contexts play in transnational policy transfer and the way this context shapes the receptiveness to evidence of what counts as relevant knowledge in school reform policy. In fact, Dolowitz (2018) reported on the criticism that diffusion studies do not capture the cultural and social complexity of policy transfers within the global–local policy nexus. Also Steiner-Khamsi (2013) refers to policy borrowing and lending that takes place despite cultural differences, simply because policy transfer does not necessarily adhere to a rational logic or pattern. Therefore it is important to apply various models and analytical lenses to study policy transfer in a regional context. Thus, this chapter employs various data sources and methods to examine how policymakers and experts in three Nordic countries locate themselves in a larger political reference space

when they develop ideas and collect facts and evidence to justify school reforms in their respective countries. The following questions drive this study:

– How and why do the experts and policymakers communicate with Nordic colleagues about the significance of various issues and ideas?
– Do government-appointed expert panels and policymakers within state administrations consider knowledge sources from other Nordic countries relevant?
– Moreover, do they share a specific interest in authorizing such sources by referencing them? Why? Why not?

By examining the latest (curriculum) reforms in three Nordic countries (Finland, Iceland, and Norway) in more detail, this chapter attempts to identify the actual role and influence of regional cooperation in relation to education reform and the status and use of regional references. The chapter also aims to contribute to the discussion on the role of regional context in transferring and translating transnational policy knowledge within the national context of policymaking processes.

Policy Borrowing Within and Beyond Regional Contexts

Nordic countries are regularly seen, from the outside but also within these countries, as one cultural and political territory. They are believed to share the same value base of the Nordic welfare state related to democracy, equality, and social justice along with a commitment to welfare policies that strive for societal well-being for the whole population (Arnesen et al., 2014; Delhey & Newton, 2005; Jacobsson et al., 2004). These countries also share a common history, as they have at times had the same head of state and even formed one union or state with varied compositions (Berntzen, 2017). These political traditions are also evident today. The Nordic countries have all developed political systems in which the nation-state provides welfare services and largely regulates the public

sector. Due to the central role of state authority in public governing, they have developed systems to take public interests into account. Hearings and public inquiries symbolize this kind of system.

In the field of education, the public school systems likewise share considerable similarities, often referred to as "the Nordic model in education" (Telhaug et al., 2006). The comprehensive basic education in all five countries consists of 9–10 years of compulsory education. There is an uncontested unanimity in the region that comprehensive basic education should be free of charge. Education policies across the Nordic countries have all been strongly influenced by social-inclusive aspects. Despite recent tendencies to introduce more market-driven policy solutions, education in the Nordic region is still seen as a crucial instrument for increasing social justice in all Nordic countries. (Arnesen & Lundahl, 2006; Lundahl et al., 2018; Lundahl, 2016)

Considering these presumable common denominators of the Nordic countries, one may expect that there exists a Nordic space for policy cooperation and thereby a considerable policy transfer of knowledge within the region. However, three particular aspects must be taken into consideration in attempts to identify this space. First, as the political scientist Paul Cairney (2016) has suggested, to understand the use of evidence in policymaking processes, one needs to understand both how the policymaking process works (p. 10) and how policymakers fit into it (p. 6). Despite their common history and similar political traditions, the decision-making procedures and the role of different policymakers in them may well vary. Hence, it is crucial to take both similarities and differences into account and not to assume that these countries are necessarily uniform in terms of political decision-making processes. Second, since the 1990s, the traditional Nordic values of universal well-being and education have been increasingly influenced by political interests in neoliberal values, individualization, marketization, and technologies of new public management. However, differences exist in the extent to which this interest has turned into a dominating feature and influenced education policy and reforms in various Nordic countries (Arnesen et al., 2014, p. 1). Third, national reforms, policies, and policy discourses have become globally framed and are partly influenced by international and supranational organizations, such as the Organisation for Economic Co-operation

and Development (OECD) and the World Bank (Rizvi & Lingard, 2010). These organizations have become active in producing large-scale comparative data and thus involved in advocating education reform agendas in the Nordic region. There are good reasons to consider the influence of these organizations and their programs in national reform making and national policies as contingent (Sivesind & Wahlström, 2016).

For instance, references to the OECD are partly related to how the data match central topics and issues in national reform processes. Moreover, although the OECD is a politically influential organization, the use of its data is mostly detached from its ideological views. In particular, numeric and comparative data from such organizations are used as evidence. Numbers are convenient tools in the current culture of evidence-based policymaking, as they appear to be neutral, apolitical, and objective (Stone, 2016). They represent what Gil Eyal (2019) called "mechanical objectivity" (p. 115) in policymaking, that is, a legitimation strategy pursued by referencing, rankings, and quantified comparisons (see discussion in Chap. 2).

Previous research has discussed the regional education space particularly from the point of view of the European Union influence and established the term "European education space" (see, for instance, Lawn et al., 2011; Grek & Rinne, 2011). Researchers have demonstrated that this policy space has been extensively shaped and sustained by "governing by numbers" (Ozga, 2009; Rose, 1991) as a technology of governing. Grek and Rinne (2011, pp. 29–30) and Martin Lawn et al. (2011) claimed that this policy space has been constructed through harmonization attempts, soft governance, benchmarking, and comparison, which evolved after governments agreed upon the Lisbon treaty (Grek & Rinne, 2011). In addition to law and regulations, transnational expert networks play a significant role in how this process is evolving (Lawn et al., 2011). In a recent article, Grek et al. (2020) characterized this form of regional space as resulting from how experts "make meaning and attempt coherence in networked forms" (p. 4). One concern in these contexts is to achieve consensus about what to measure in terms of large-scale assessment.

However, comparisons and numeric data produced by the OECD and similar organizations are not by themselves a sufficient explanation for

how regional spaces evolve. As Espeland (2015) has underscored, the objectiveness of numbers and their generic character are appealing since nearly any political narrative can easily be attached to them. In other words, the generic character of numbers supports the creation of political narratives. Thus, the narratives of the regional practices and mindsets can serve as a lens through which to understand cooperation and shared interests that shape Nordic education policy space in particular ways.

Our hypothesis is that this regional Nordic policy space, although partly gaining its significance from international networks, operates differently than for instance the European policy space. One reason is that the Nordic region by itself does not produce numbers for assessing education, like the OECD does. Thus, the Nordic community of policymakers and experts relies on something other than agreements upon benchmarks and standards, and we set out to explore this Nordic "other." This chapter will examine how this "other" is constructed by relating to a shared policy space that is developed and sustained in various ways.

To analyze Nordic cooperation as a regional space, we will draw on Massey's (1994, p. 2) conceptualization of spatial as "the social stretched out" and her idea of space as not fixed and static but rather "a product of interrelations and constituted through interactions" (p. 7). Following this idea, we look at the Nordic policy space not as a separate layer between the national and transnational, but as a space where national actors interact and form connections to make sense of and give meanings to the international. Thereby, they construct a regional mindset, which we refer to as the *Nordic "other."* As such, the Nordic policy space is in a state of constant becoming and fluidity, created and re-created through the interactions of the involved policymakers, experts, and stakeholders and their narratives of relating to each other.

Country Cases

As we have seen in the previous country chapters, the number of references to other Nordic countries (i.e., regional references) identified through bibliometric network analysis was surprisingly low. We also found that the country distribution of regional references varied to some

degree. Norway used 66 regional references, significantly more than Iceland, where only 4 references were regional. Among those regional references used in Iceland source documents were a World Health Organization (WHO) document published in Denmark and documents produced by the European Agency of Special Education, placed in Denmark. In Finland, we identified 11 references as regional. The rare use of regional references and the frequent use of national references prompted us to wonder why this pattern had become so biased.

In order to illustrate the regional network pattern of references, we conducted a bibliometric network analysis, which we present in more detail later in this chapter. We also decided to combine this network analysis with complementary data sources to examine the three country cases—Finland, Iceland, and Norway—in more detail. These three countries are similar in terms of their legacies as young nation-states compared to Sweden and Denmark (Elgenius, 2011), but they differ in their decision-making procedures and in the role that policy documents play in these processes. Thus, we decided to conduct interviews with experts with knowledge and information about these features of the system. All experts interviewed were involved in the national reform processes that are examined in this book.

We should also mention that the reforms we examined were partly different in terms of their timing, focus, and scope. In the case of Finland, we examined the latest reform of the National Core Curriculum (2014). As explained in Chap. 5 in this volume (Volmari, Kauko, Anturaniemi, & Santos), in the case of Finnish curriculum reform, the research team made the decision to focus on the reform of the objectives of the National Core Curriculum and the distribution of lesson hours from 2012 (Government Decree 422/2012). The government decree is based on a white paper and it delegates the power to decide on the content of the core curriculum to the National Agency for Education, within the framework the government decree sets for this work. The most prominent policy documents in this process were the white paper *Future Basic Education* from 2012 (Opetus- ja kulttuuriministeriö, 2012) and the green paper *Basic Education 2020: Common National Aims and Division of Teaching Hours* from 2010 (Opetus- ja kulttuuriministeriö, 2010). This green paper was originally designed as a white paper, but it was discarded

at the last minute due to political disagreements and a change in political power. Nevertheless, the 2012 white paper was mainly based on the green paper preceding it, as demonstrated in Chap. 5. Both working groups utilized expert hearings and statements and extensively involved different stakeholder groups, particularly in the process of the green paper. For example, the working group of the green paper 2010 received commentary from over 200 municipalities in Finland and utilized a survey of over 60,000 students on their experiences in school and their vision of an ideal school.

In the case of Iceland, we base our analysis in this chapter on three documents used to govern Icelandic compulsory education, together with the law, regulations, and formal curriculum (see Chap. 6). Two of these are classified as white papers and one as a green paper. As discussed previously in Chap. 2, white papers are political by default and therefore influenced by the government and the minister in charge of the policy processes. However, the political influence by the administration of the same government varies depending on the continuation of policies over time across various governments. If the background work initiated by one minister leads to the continuation of policy by the previous minister, then the background work sets the agenda and may not even reach the status of being enquired by a green paper. This is often the case in Iceland, where recent decades have offered many examples of extensive background work being conducted and used to underpin reform bills and resolutions in the form of extensive discussion and consultation rather than in the form of public enquiring and formal written documents, which we refer to as green papers. Thus, although the working mode of Icelandic policymaking relies, sometimes extensively, on internal and external documentation, this evidence does not necessarily reach the stage of reference lists or other formal acknowledgment.

This situation varies starkly from the Norwegian case. As already presented (see Chaps. 7, 9, and 10), Norway has expended a huge amount of resources on public commissions with a mandate to evaluate and make recommendations to decision-makers regarding how to reform and renew the public sector. The government appoints members to sit in these commissions. In this chapter, we refer to eight such reports and two white papers. We include references in these documents in our bibliometric

network analysis, while two particular inquiries (Bostad and Ludvigsen commissions) and one white paper (Subjects—In-depth Learning—Understanding, see: Appendix 1) serve as the main data source for our qualitative study. While the Bostad commission made inquiries and advised the ministry and parliament on how to revise the education clause formulated within the School Act, the main work task of the Ludvigsen commission was to recommend overall goals, aims, and structures for renewing the national curriculum. A group of officials with educational-scientific backgrounds and experience from the Directorate of Education assisted the experts during the writing process, and civil servants within the Ministry of Education were the main actors in the process of formulating the white paper. They worked closely with the political leadership to finalize the paper. Throughout the process, various groups of stakeholders were invited to provide comments.

Altogether, the three cases selected for this study vary in terms of organizational arrangements for preparing political decision-making processes. For instance, in contrast to Norway, academic participation in Finnish preparatory working groups has declined during the last decade. In the national core curriculum reform of 2010–2016, the working groups we examine in this chapter contained no scientists, although scientific experts offered their insights. The members of the working group of the white paper from 2012 (Source Document 66 in the Finnish sample, see Chap. 5) consisted only of the civil servants of the Ministry of Education and Culture. In the working group of the green paper, members came from the main political parties and stakeholder organizations in addition to civil servants. There were no representatives from other countries. Norway chose a rather opposite approach. A scientist led Ludvigsen's committee, which included other scientist members as well. Two of the members represented other Nordic countries, namely Denmark and Sweden. Conversely, Iceland has adopted no formal procedures to produce white papers based on inquiry bodies, although the government plans to move in this direction. It is up to each minister to determine how the work is approached, the amount of party political involvement, and the influence of stakeholders or various professional groups. Parliament is not involved until a very late stage in the formulation of laws within education. To conclude, the three case studies varied

in their timing, focus, and scope, as well as in terms of organizational arrangements. But they also varied in what was valued as expertise and how and in which stage of the reform process expertise was utilized.

Data and Methods

Our research design originally stemmed from the five national country cases. Across the five Nordic countries, there was one finding that particularly puzzled the research teams. In spite of what might be expected and what previous research on education transfer has predicted, we found no solid evidence of regional policy transfer or learning. In fact, the number of regional references in each country was incredibly low, and a shared knowledge base was almost absent. This sparked our research question and design, and we decided to combine methods to see if we could find any evidence of Nordic policy learning and sharing that were not necessarily authorized within bibliographies and footnotes.

To begin, we conducted a bibliometric network analysis of the regional/Nordic references to identify any evidence of a common Nordic knowledge base. In the bibliometric network analysis, we used the software program UCINET to generate statistics on Nordic references and draw illustrations of the Nordic knowledge network. The method of bibliometric analysis and how it was applied in this research project is explained in more detail in Chaps. 1 and 2. However, this method did not appear to offer a complete picture of Nordic policy cooperation and of the possible knowledge exchange within the Nordic region.

Inspired by Törnberg and Törnberg (2019), we perceive networks as cultural products in which "discursive and cultural elements play out and shape the networks in which they exist" (pp. 61–62) and adopt their suggestion to complement network analysis with other methods, namely with expert interviews. We conducted interviews with members of the key working groups and committees in Finland and Norway and some key ministerial administrators in Iceland. We used the interviews both to obtain new insights into regional knowledge sources and to acquire knowledge about Nordic cooperation and knowledge-sharing, which cannot be disentangled by bibliometric network or document

analysis. We used thematic expert interviews with the same list of topics in all three countries. We conducted 18 semi-structured interviews in total, 8 in Norway, 5 in Finland, and 5 in Iceland. We recorded some interviews using Zoom and others with single recorders in physical settings, and all interviews were transcribed to ensure the validity of our approach.

We analyzed the interview data while keeping the following points in mind. First, informants were experts in their field and had been members of the preparatory committees or working groups in the reforms we examined. Hence, the information they provided can be seen as reliable firsthand information. However, we acknowledge that the informants shared with us their accounts and recollections, sometimes of the work they were involved in almost ten years ago. Attentive to these two vantage points, we decided to categorize our interview findings into clusters of main narratives.

Results

In our study, we set out to identify the actual role and influence of the regional, Nordic cooperation in relation to our three country examples (Finland, Iceland, and Norway) of an education reform, and the status and use of regional, Nordic references in these reforms. Our main methods were bibliometric network analysis and thematic expert interviews. We present our findings below, divided into two subsections according to our two main methods.

Bibliometric, Regional References, and the Absent Nordic Other

The bibliometric analysis reveals, in part, where different countries have looked for inspiration and influence. The whole database, including the references of all five countries, had a total of 225 regional references, meaning references where a country referred to a publication published in another Nordic country. There are numerous reasons to expect that

one could detect notable policy referencing of information sources between the Nordic countries in our data. However, this does not seem to be the case. The number of Nordic references used in these reforms was surprisingly low compared to the use of domestic and international references (see Baek, Tiplic, and Santos, Chap. 9, Table 9.3). References from other Nordic countries amounted to approximately 2–7% in all of the countries among the five cases, which we consider as a key finding.

In Finland the regional Nordic references amounted only to 1.63% and in Iceland 2.08%. In Norway, 7.09% of all the references were from Nordic sources, but compared to the amount of domestic (66.83%) and international references (26.08%), this percentage was low as well.

In Table 12.1, we can see how references to sources published in another Nordic country were distributed between the five countries. Altogether 44% of the time, the referenced documents were published in Sweden, while 31% of the time, a country referred to a publication from Denmark. Sources published in Finland or Norway were referenced less than 10% of the time and Icelandic sources only 1% of the time. Based on Table 12.1, one can conclude that the regional evidence base consists predominantly of evidence published in Denmark or Sweden.

Table 12.1 also shows how the regional references were distributed in each country. Documents published in Sweden were the most referenced in Denmark, Finland, and Norway. For example, five out of eight Nordic references made in the Danish source documents were published in Sweden. In the Finnish source documents, 7 out of 11 cited Nordic references were of Swedish origin. In Norway, the 180 regional references cited in the source documents were distributed slightly more evenly between Denmark (70) and Sweden (77). Iceland served as an exception to this pattern, as in the Icelandic documents only four regional documents were cited, all of which were published in Denmark. However, one was produced by an international agency and three were by a European agency. In the case of the Swedish reform, 44% (8 out of 18) of the regional references cited in the source documents were published in Denmark, with 4 from Finland and 5 from Norway.

Although Danish and Swedish documents were used more than the Finnish ones, the most prominent documents in the Nordic knowledge network would appear to be those used more than once and in more than

Table 12.1 Nordic reference distribution per country (references in all source documents)

	Denmark		Finland		Iceland		Norway		Sweden		Unclear Nordic		Total	
Source	%	N	%	N	%	N	%	N	%	N	%	N	%	N
Denmark			12.50%	1	0.00%	0	25.00%	2	62.50%	5	0.00%	0	100%	8
Finland	9.09%	1			0.00%	0	18.18%	2	63.64%	7	9.09%	1	100%	11
Iceland	100.00%	4	0.00%	0			0.00%	0	0.00%	0	0.00%	0	100%	4
Norway	38.89%	70	8.89%	16	1.11%	2			42.78%	77	8.33%	15	100%	180
Sweden	44.44%	8	22.22%	4	0.00%	0	27.78%	5			5.56%	1	100%	18

one Nordic reform. When we look at co-citations, or those sources referenced by more than one document, the pattern tells a slightly different story. Out of the seven most co-cited sources, three were published in Denmark, two in Finland, and two in Sweden. The Danish and Swedish publications were cited in only the Norwegian policy documents. Both of the Finnish publications were cited by two different Nordic countries. Specifically, the Finnish National Core Curriculum of 2014 was cited two times by different Norwegian sources and one time by a Swedish source. Likewise, the Finnish National Core Curriculum of 2004 was cited two times by different Norwegian sources and once by a Danish source.

Moreover, the two most cited Finnish documents were actual national core curricula for comprehensive education (2004 and 2014), of which we examine the 2014 curriculum as an example of a Finnish education reform. These documents, the 2004 and 2014 National Core Curricula of Finland, were also the only ones among the most-cited regional documents that were actual national core curricula referenced by more than one country. They were part of the knowledge base of the reforms in Denmark, Norway, and Sweden, which indicates that other countries have looked upon Finnish curricula as prominent regional references.

Figure 12.1 illustrates the whole network, further confirming the findings explained above. Norway, in white, clearly co-cited a cluster of regional knowledge most, as indicated by the arrows pointing outward, indicating policy borrowing. The network consists of predominantly Danish (red quadrants) and Swedish (yellow quadrants) references, which were used in the majority of Norwegian source documents (white dots). The two Finnish (blue quadrants) documents are medium-sized, as they were referenced less by other Nordic countries than the most co-cited documents of Denmark and Sweden, which appeared in the Norwegian data.

As these results demonstrate, the regional Nordic references were mostly absent in these five reforms since there were relatively few co-citations. National chapters have explained this as a matter of self-referencing (Chaps. 5 and 8). However, Norway was a small exception among these countries, with its regional references amounting to almost 7% (see Table 12.1) and with a cluster of references that were co-cited

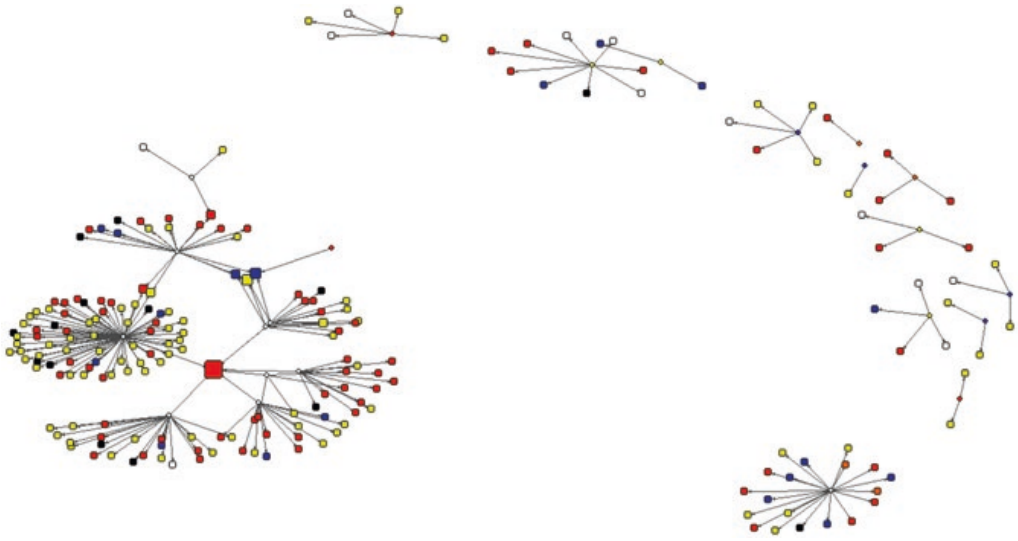


Fig. 12.1 Network of the Nordic references. (*Note*: This figure includes only references for which the publication location differed from the publication location of the source documents. Denmark = red; Finland = blue; Iceland = orange; Norway = white; Sweden = yellow; unclear Nordic = black)

(see Table 12.2). By looking into these co-cited references, we find that the reform made use of some reports published in other Nordic countries more actively than the level observed in other Nordic countries' documents. Yet, even in Norway, the number of regional references was lower than originally expected on the basis of previous theories of policy transfer within a region and between similar cultural contexts.

Cooperation and Communication Within the Nordic Policy Space

The Nordic countries maintain close political and policymaking connections to each other, and their governments have formal connections at multiple levels, for example, through the work of the Nordic Council (founded in 1952) and the Nordic Council of Ministers (founded in 1971). From 1967 national ministries in education initiated Nordic research collaboration to stimulate more advanced use of teaching

Table 12.2 Most co-cited Nordic references

ID	Title	Location of publication	Type	In-degree
5781967	*Lærerkompetanse og elevers læring i barnehage og skole. Et systematisk review utført for Kunnskapsdepartementet, Oslo. København: Danmarks Pædagogiske Universitetsforlag og Dansk Clearinghouse for Uddanelsesforskning* [Teacher Competence and Students' Learning in Preschool and Primary Schooling. A Systematic Review Conducted for the Ministry of Education and Research, Oslo]	Denmark	1	7 (cited by 7 different Norwegian sources)
5781631	*Utmärkt undervisning: Framgångsfaktorer i svensk och internationell belysning. Stockholm: Natur och kultur* [Excellent Teaching: Factors in Making Progress Within Swedish and International Perspectives]	Sweden	2	4 (cited by 4 different Norwegian sources)
5782251	*Betydelsen av icke-kognitiva förmågor. Forskning m.m. om individuella faktorer bakom framgång. Sverige: Skolverket* [The Significance of Non-cognitive Skills. Research About Individual Factors That Explain Improvement]	Sweden	4	4 (cited by 4 different Norwegian sources)
5782322	*Grunderna för läroplanen för den grundläggande utbildningen 2014* [The Curriculum for Basic Education 2014]	Finland	4	3 (cited by 2 different Norwegian sources and 1 Swedish source)

(*continued*)

Table 12.2 (continued)

ID	Title	Location of publication	Type	In-degree
5782324	*Grunderna för läroplanen för den grundläggande utbildningen 2004* [The Curriculum for Basic Education 2004]	Finland	4	3 (cited by 1 Danish source and 2 different Norwegian sources)
5781048	Basic learning: Thematic report 1: Ensuring basic skills for all, Working Group 1, København	Denmark	1	2 (cited by 2 different Norwegian sources)
5781956	*Resultater fra Kartleggingsundersøkelse i Kristiansand kommune 2013* [Results from a Survey (on students' learning performance) in Kristiansand]	Denmark	1	2 (cited by 2 different Norwegian sources)

Note: "Nordic" references refer to those published in a Nordic country that are cited by source documents published in a different Nordic country (e.g., Danish documents cited by Swedish source documents or Finnish documents cited by Norwegian source documents)

technology. From early on, these Nordic institutions initiated evaluations, conferences, and formal inquiries to address issues of significance for the governance of Nordic school reforms. One known report published by the Nordic committee for educational research, chaired by Johs Sandven, addressed, for example, how programmed teaching and innovative usage of new technology can improve teaching in schools (Dahllöf & Wallin, 1969). Another report about the administration of the Nordic school systems was published in 1974 after two years of work by a Nordic working group of civil servants who had the mandate to help harmonize the national curricula for the compulsory school systems (Nordiska rådet, 1974). They were also asked to provide information about the Nordic school system of relevance for teachers, associations, and administrative bodies. The Nordic Council (Nordiska Ministerrådet, 1978) made a revision of the report four years later. Here, they presented formal

information about the different school types within the education system and how they were reformed within the single country.

Later reports offered evidence of systematic cooperation across the Nordic countries, partly formalized through a governing body of civil servants from the Nordic ministries and a working group that was responsible for meetings and conferences (Nordisk Ministerråd, 1990). One outcome in the early 2000s was the conference report *Vision and Reality* (Sigurðardottir & Harðardóttir, 2000), which addressed evaluation and assessment in Nordic schools. A later report from the Nordic Council of Ministers was *Northern Lights on PISA 2003—A Reflection from the Nordic Countries* (Mejding & Roe, 2006).

This report, however, did not originate from the work of the Nordic Council; instead, it was written by Nordic researchers who collaborated within the OECD. The Department of Teacher Education and School Development at the University of Oslo had published an earlier report entitled *Northern Lights on PISA, Unity and Diversity in the Nordic Countries in PISA 2000* (Roe et al., 2003). This report stated that PISA represented a new commitment by the governments of OECD countries to monitor the outcomes of education systems with a focus on learning achievement. From then on, it seems that Nordic data and knowledge about the quality of the school systems was hijacked by organizations other than the Nordic Council. Yet, meetings among civil servants and experts within the context of the Nordic Council continued.

To further illustrate the frequency of Nordic cooperation in the field of education, Table 12.3 presents the number of meetings taking place between top political and administrative levels, as a matter of course, every year within the arena of education and research (and a similar pattern would be obtained for a number of other arenas).

The informants in all three countries talked about constant and regular formal cooperation, such as annual meetings of the directors of the national education agencies, meetings of Nordic curriculum specialists once or twice a year, and cooperation within the Nordic Council of the Ministers. In addition, ad hoc groups are formed to deal with pressing

Table 12.3 Number of meetings each year 2013–2019 under the auspices of the Nordic Council and Nordic Council of Ministers

	Nordic Council for Culture and Education	Nordic Council of Ministers for Education and Research	
	Number of meetings of political representatives	Number of ministerial meetings	Number of ministerial administrator meetings
2013		1	5
2014		1	4
2015		1	4
2016	5	2	4
2017	5	2	4
2018	5	1	4
2019	5	1	4

Source: https://www.norden.org/en/organisation/nordic-co-operation

Note: These meetings related to education involved at different times parliamentary representatives, ministers of education, and civil servants at the ministries of education. Adapted from the webpage Nordic cooperation, which describes the organization of both the Nordic Council and the Nordic Council of Ministers

issues when the need arises. Although the bibliometric network analysis demonstrated a very low percentage of regional references, with Norway being the only Nordic country that seemed to refer substantially more to other Nordic countries, the expert interviews revealed active and vivid cooperation and communication among the Nordic countries. Our informants noted that, in addition to the official meetings, several groups met regularly at the Nordic ministerial level or among the governmental organizations outside the purview of the formal Nordic Council cooperation. Several experts talked about frequent but more informal communication and collaboration, like phone calls and study visits. Coherent documentation of this is not available as formal minutes are not always written or centrally available even though all the meetings are filed within individual ministries. There is no question of extensive Nordic contact and discussion at the Nordic policy level, but little evidence is available about the actual impact of those meetings on policy formation.

Legitimation, Policy Dynamics, and the Omnipresent Nordic Other

Since the bibliometric network analysis revealed a very low use of regional Nordic references despite well-established Nordic political and cultural cooperation, we decided to conduct interviews with the key experts involved in the reforms in question in Finland, Iceland, and Norway. In a total of 18 interviews, we asked the informants questions about their role in the reform or working group, their professional background, and the issues and themes they considered relevant during the reform process, in the work of a working group or commission, or in the Nordic cooperation more generally. In addition, we asked about any national, Nordic, or international conferences, workshops, or meetings they attended during the process with a particular focus on any Nordic meetings or other forms of Nordic cooperation.

We also specifically asked them for possible explanations for the lack of Nordic references in the key policy documents. The absence of regional bibliometric references in our data came as a surprise to most informants, as they all considered Nordic cooperation important and meaningful. From responses to the question on the possible reasons for the absence of references to Nordic knowledge sources in the actual policy documents, we identified four main narratives the informants used to explain this absence:

1. Nordic cooperation is not well documented and does not produce data that lends itself easily to reference.
2. Nordic cooperation is such an implicit part of policy cooperation that it does not need specific mentioning.
3. Legitimation function and hierarchization of evidence play roles when choosing evidence to reference in written documents.
4. In the curriculum reforms, national orientation and political dynamics still play the greatest role.

The first narrative our informants provided for the absence of Nordic evidence in the actual written documents was that Nordic cooperation is often rather informal in nature and hence not well documented. Earlier

in this chapter, we discussed the official forms of cooperation. However, many informants asserted that a significant part of the cooperation occurs in more informal contexts and ways. For instance, they described study visits as being very common between the Nordic countries. These visits seemed to be particularly common when a country was in the middle of a reform process. Informants in all countries reported this kind of visit as one form of collecting knowledge and ideas. Several Finnish and Norwegian informants mentioned the study visit of the Norwegian Ludvigsen's committee to Finland. Although the Norwegian committee prompted the visit and prepared a set of questions it specifically wanted to discuss to learn about the recent Finnish core curriculum reform, the Finnish informants described the meeting as one of mutual exchange and learning. In general, the informants described Nordic education cooperation as the "kind of expert kind of cooperation, where we do discuss very profoundly why someone has done something" (working group member, Finland). Since this kind of cooperation is not documented in memos, meeting minutes, or reports, it does not produce data that lends itself to reference in the sense of assertions backed up with information (Cairney, 2016) like the bibliometric references examined in this chapter.

The second narrative we discovered is that Nordic cooperation is such an implicit part of policy cooperation that it does not need to be mentioned specifically. This second narrative is closely linked to the first one. Most informants declared that in general other Nordic countries were always looked at and their policy developments carefully followed and that in any reform process, one tended to always start by looking at other Nordic countries. One informant specifically explained that "we always start by looking at other Nordic countries." More specifically in the reforms we examined, the informants assured that this was in fact done, even if it may not have been translated into bibliometric references. This discrepancy can partly be explained by the first narrative, in which cooperation and policy influences are not carefully documented. Another explanation for Nordic evidence being tangential at most in the documents we scrutinized could be that Nordic cooperation is axiomatic and no bibliometric reference is possible or needed. The following two Icelandic interview excerpts illustrate this point with lucidity. While

discussing updating a law on compulsory education, an Icelandic informant noted:

> Thus, it was in all this process that the Nordic laws were always on the table, as a sort of a working document, and we used arguments from the Nordic background documents. I am pretty certain. But it was such a matter of course that it didn't need mentioning. (Civil servant, Iceland)

In discussing updating the curriculum, an informant stated:

> I am pretty certain, as I remember it, we were all reading the Nordic curricula, and this was taken for granted and didn't need discussing. (Civil servant, Iceland)

For some of these Icelandic informants, the Nordic space was such an implicit part of the process that it did not need to be acknowledged specifically. Furthermore, we encountered similar narratives in the Finnish and Norwegian interviews. The narratives we discovered of the Nordic space being so implicit yet simultaneously omnipresent bear similarities to the description of pre-Lisbon European education space, as described by Grek and Rinne (2011). Unlike the European education space, the Nordic is not built on harmonization through benchmarking and numbers, but it still pre-exists in the hearts and minds of the people, like the pre-Lisbon European space did (Grek & Rinne, 2011, pp. 29–30). As such, it is so ubiquitous that no distinct mentioning is required.

According to several informants, the absence of regional Nordic evidence may be related to the dynamics of externalization (the inclination to refer to the education systems of other countries or information produced by global actors in reform proposals, see for instance: Steiner-Khamsi, 2003) and to the tendency to maintain the status quo and avoid including Nordic knowledge that may prove controversial compared to the predominant global policy discourses. In an interview about the Norwegian committee work, one informant described the following:

> I think it's about externalization. I think international references are much heavier in those situations. When it comes to writing policy texts, so there were a lot of Nordic references in the discussions but yeah, I can also see

> that in order to get legitimacy for the policymaking international references are playing a much more, a larger role than the Nordic references so, and I think it's about not to challenge the consensus too much. If you bring in domestic or Nordic references, it could be more controversial because the discussions that usually emerge in reform topics are much more a local thing. (Committee member, Norway)

This excerpt illustrates well the third narrative we identified, which is that the legitimation function and hierarchization of evidence play roles in choosing evidence to reference in written documents. Several informants acknowledged that Nordic cooperation does not produce data that can be used as references in policy documents, but they also stated that, even if it did, international evidence would still enjoy a higher status as a legitimation instrument. Our informants frequently brought up legitimation as an explanation for the absence of Nordic knowledge as evidence. In particular, they mentioned the OECD as one of the main providers of policy evidence used for legitimation of nationally made decisions.

These findings are perfectly in line with the theorizations of Wendy Espeland (2015) and Deborah Stone (2016), who stated that numbers are particularly appealing for policymakers and politicians since their ostensible objectivity makes them ideal in legitimating any political argument. The OECD produces typically comparative data based on standardized indicators detached from both the multiplicities of local cultures and situations and the organization's own political agenda. This perceived objectivity makes this data an excellent tool for mechanical objectivity (Eyal, 2019), as it can be used to match any central topic or issue in the national reform processes.

The OECD also produces an extensive amount of reports and other written materials where this data is documented and easily usable for bibliometric reference. However, our informants stressed the legitimation status and function of the OECD data over the mere technicalities of it being carefully documented. In fact, one informant even mentioned that country reports were specifically ordered for national legitimation purposes. The informant questioned the previous research on transnational governance, claiming that the data production of the OECD often stems from national needs for evidence. The informant further asserted that the

OECD's reports are frequently commissioned by national governments for specific legitimation needs. He stated:

> Well, that transnational governance, there is of course this point of view related to it, that the OECD produces different kinds of data. That there is real data that can be analyzed nationally and base the decisions on, to use it as basis for decision. But then there are also these country reports that the OECD countries can order, so this kind of commissioned research. And it is of course so, and we have examples of this as well in our state governance, that if not directly that, that they stem from the own interests of the country in question. That one decides on a political measure, and then one orders the country report from the OECD, where then international evaluators become involved. And before these reports are published, the countries and the OECD do discuss them. So I think this idea of transnational governance is just one angle, namely this when one uses these country reports. But here one comes to what I said before, the blanks in evaluating research, that one legitimizes one's own views with some material produced by an international actor. (Working group member, Finland)

This interview excerpt illustrates the fourth narrative as well. Most informants acknowledged and underlined the fact that in curriculum reforms, the national orientation and political dynamics still played the greatest role. In general, national core curricula, as they have been described by our informants, are securely in the national domain of education policy and politics, as this Norwegian informant emphasized:

> Perhaps one of the explanations is that in most countries they probably consider such curriculum work as a very national domain. … Every time in a way curricula are put on the agenda internationally it is like—the first things everyone says, is that curricula are a national domain. We do not want such an international decision on that. That this area is not suitable for that. (Committee member, Norway)

The fact that curriculum development is still seen as a very national domain of education policy may well explain not only the absence of regional references in our data, but also the self-referential nature of the country cases addressed in more detail in the previous chapters. Perhaps research on another domain of education policy, for instance higher

education policy, would have produced data that included more international and regional references. However, the influence of evidence or the best available knowledge did not seem to be the most important factor in determining the direction for the reforms. The result of the reforms often arose from negotiations, and issues on the reform agenda sometimes became politicized. In a conflict or gridlock situation, compromises were inevitable, even if it meant not utilizing the best knowledge available, as demonstrated in the following interview exchange:

Interviewer: Do you remember any official Nordic meeting or network that you were in contact with during the reform processes?

Informant: No, not directly—not directly in the project [of writing a white paper]. But we have working groups that work like that, and everything we have written has in a way also been negotiated by them. And we also get text input from people who also have this as their specialized area.

Interviewer: I wonder about the process of deciding which sources of knowledge are relevant to draw on—in a report to the parliament. How have you decided which sources you would like to take a closer look at and include in your writing process?

Informant: I have actually tried to have as broad an approach as possible to see what exists. … If you look at the assessment chapter, for example, I have to see what is the latest and what is really happening in that field now. So I have in a way tried to be as broad as possible—for the recommendations in the NOU[1] is one thing, and they are evaluated against a knowledge base, too, but at the same time we have to see if there are other things, and it is often the case that maybe the politicians want something else than what is recommended and proposed in the NOU, as well.

Interviewer: A naive question: is it in the end a process where you look at the list and just check if the reference list reveals different selection criteria? Or is that list just a result?

Informant: I wish I could answer that [laughs], but I think it's a result. (Committee member, Norway)

In spite of the narratives explaining the absent Nordic "other," our informants described Nordic policy cooperation as a space of oneness. In the interviews, many described this space as a feeling of belonging. According to our interview findings, the Nordic education space works as an arena where issues and policy developments are discussed with the like-minded. Still, the actors are simultaneously aware that the education systems, the political situations, and even the degree of marketization tendencies in the five countries are rather different. Though the cooperation may not produce actual evidence according to the definition we employ in this chapter, the Nordic education space had concrete benefits as well according to our informants. These benefits materialized particularly in the global policy space, for example in the meetings organized by the OECD where the Nordic representatives collaborated, for instance, by voting for same policy solutions and recommendations. An important part of informal cooperation happens in this kind of international setting, as demonstrated in this excerpt from an Icelandic civil servant:

Informant: As you look to these countries, then one sees a certain underlying OECD influence. Some may think that this is a hard line coming from above, but that is not correct. These are influences formed in unison by the participating countries, and I think this has normally been so. I think there are both indirect and direct influences from there. You attend twice a year with representatives from all the countries. There is a special Nordic meeting, always a preparatory meeting before the OECD meeting, where you discuss with your Nordic colleagues.

Interviewer: Is it a special meeting, or does it connect to the OECD meeting?

Informant: There is always a dinner before, and thus you get to know these Nordic representatives and people discuss issues. Hardly ever a formal Nordic stand is taken but, yes, some coordination. If the Nordics want to take the initiative, then it is coordinated there.

Interviewer: Is this a formal meeting with an agenda?

Informant: No, this is just an informal dinner. Yes, just discussion. Of course, at these [OECD] meetings, there are loads of reports and documents, project proposals. The Nordic countries may have

decided to take a stand on some emphasis in new projects, as there are votes on what to research.

Interviewer: And this carries with it some influence? Nordic influence?

Informant: Absolutely. The Nordic countries carry much influence in there. They are always, normally, in agreement. One takes the floor, and the others support. It carries some weight. Even China or large countries like the US, which are always on their own, they have their one vote each. Thus, yes, of course, it carries some weight. And people notice. (Civil servant, Iceland)

In this case, the international setting acted as a glue between the Nordic countries, since the Nordic representatives met beforehand during an informal dinner to discuss the formal issues on the OECD meeting agenda. The Nordic community of sameness was, in this setting, a strategic tool to gain more power in an international setting, as the Nordic countries supported each other in official votes. This arrangement indicates that, regardless of the possible differences in education systems, policymaking procedures, and political situations in these countries, they share some fundamentally similar values and interests that allow them to reach such consensus. The aforementioned excerpt also validates the previous claim of several scholars that the Nordic countries are seen as one entity from the outside. It demonstrates that other countries and regions acknowledge the weight of Nordic unity.

Moreover, the conduct and practices of the Nordic actors in the international policy space also demonstrate how the national, regional, and international are not layered and separate. The global dynamics of the education space are not just a matter of international organizations exercising their influence on the national level, with the regional level acting possibly as a buffer or a mediator in this process. Instead, our interviews painted a picture of an active and rather powerful Nordic education space that stretches out through the connections of the national actors and exercises its influence as one entity in the international decisions and recommendations of the OECD and other organizations. Even if this

influence cannot be traced back in the policy documents as bibliometric references or as evidence in the way defined by Paul Cairney (2016), the Nordic education space has in fact influenced what is included in the international policy recommendations (e.g., the OECD reports) now used as evidence in the national documents. The regional context may shape receptiveness to evidence, but it may also shape the actual sources of evidence when they are created and drafted in the international context of policy cooperation. In short, there certainly is more in the policy process than meets the eye.

Conclusions

Previous research has implied that neighboring countries may be more receptive to the same policy solutions due to their commitment to a common culture and similarities in their legal and political systems. The Nordic region can be looked upon as a cluster of such countries. They are often, both from the inside and the outside, perceived as one cultural and political territory. One could thereby expect considerable transfer of policy knowledge within this region. However, our findings reveal that the Nordic policy cooperation and exchange of policy knowledge in the field of education is far more complex and influenced by multitude of aspects and dynamics, in addition to cultural, legal, and political similarities.

In this chapter, we have investigated the use of regional Nordic policy knowledge in education reforms in three of the Nordic countries: Finland, Iceland, and Norway. Our starting point was the definition of evidence by Paul Cairney (2016, 3) as "an argument backed by information." By employing both bibliometric network analysis and thematic analysis of expert interviews, we have examined how policymakers and experts in these three countries locate themselves in a larger political reference space when they develop ideas and collect evidence to justify school reforms in their respective countries. We have asked whether government-appointed expert panels and policymakers within the state administration consider knowledge and information from

other Nordic countries relevant. Moreover, we examined whether they demonstrate a specific interest in authorizing such sources by referencing them in public policy, and investigated the factors guiding these decisions.

Our bibliometric network analysis revealed a notable absence of Nordic references in the source documents we included in our study. Regional Nordic references amounted to only 1–7% of all the references, and we found very few references that were cited by more than one country. This finding indicates that publications from other Nordic countries are not considered relevant in terms of "authorized evidence" that is explicitly included in reference lists or footnotes in white and green papers. Nevertheless, our interview data shows that Nordic cooperation in the field of education policy is vivid, frequent, and ample. Therefore, good reasons remain to argue that the expert panels and policymakers involved in these reforms are very well informed about emerging trends and ongoing reforms in other countries.

In the interviews, we asked our informants for reasons why Nordic knowledge does not appear as the most prominent reference source in policy processes; in other words, we wondered why it is not referenced and used as evidence in the policy documents. We discovered four main explanatory narratives for this phenomenon. First, Nordic cooperation is not thoroughly documented nor does it produce data that lends itself easily to reference. Second, Nordic cooperation is such an implicit part of the policy process that it does not need to be mentioned specifically. The third explanatory narrative is related to the legitimation function and hierarchization of policy evidence. Even if Nordic cooperation would produce data that was easy to reference, international evidence still had a higher status as a legitimation device than regional evidence. Finally, the fourth explanatory narrative offered by our informants was that national orientation and political dynamics still play the greatest role in curriculum reforms. Despite increasing transnational influences, the curriculum is still characterized as a particular domain in education policymaking and politics, considered predominantly national by character. Although school reforms reflect international influence, the problems addressed turn into national concerns when they are handled. In particular, the policymakers writing the white papers argue that their job is to bridge the

gap between political aims and projects on the one hand and broad expertise on the other hand, which implies complex processes that involve a range of stakeholders.

In addition to investigating why Nordic evidence is or is not referenced in the policy documents, our aim in this chapter was to examine how policymakers and experts in Finland, Iceland, and Norway locate themselves in a larger political reference space. We have developed a notion of a Nordic education space in which national experts and policymakers "make meaning and attempt coherence in networked forms" (Grek et al., 2020, p. 4). The Nordic policy space is characterized by fluidity. We have shown that there are several forms and networks of Nordic cooperation in the field of education policy, and national experts often participate in multitudes of networks and forms of cooperation. The reference space of the Nordic experts stretches out from the national to the transnational through their interactions, connections, and networks. The Nordic education policy space is constructed and maintained in different settings of cooperation and communication, with some taking place in the regional and some in the international domain. When the actors meet in international settings, consensus-making is of core importance between representatives from the Nordic countries. This differs from regional meetings where they rather explore national solutions to common problems. Thus, we demonstrate that there are several forms and networks of Nordic cooperation that have various functions in terms of evidence-based policymaking depending on the context in which collaboration takes place.

To conclude, the regional Nordic policy space is, in fact, in constant movement and a state of becoming. As a result, both comparative research and the actors involved in this continuously evolving space are challenged to explain its role and function and to pinpoint its changing forms in a comprehensive manner. We have aimed to contribute to this discussion, but we acknowledge that, in line with the nature of the constant becoming of this space, we may have posed more questions than we have answered. Instead of offering finite conclusions, we have created new openings for further discussion. These openings are much like the policy space we have examined—in a constant state of becoming and hence infinite in nature.

Note

1. NOUs are Norwegian Official Reports.

References

Addey, C., Sellar, S., Steiner-Khamsi, G., Lingard, B., & Verger, A. (2017). The rise of international large-scale assessments and rationales for participation. *Compare: A Journal of Comparative and International Education, 47*(3), 434–452. https://doi.org/10.1080/03057925.2017.1301399

Arnesen, A. L., Lahelma, E., Lundahl, L., & Öhrn, E. (2014). Unfolding the context and the contents: Critical perspectives on contemporary Nordic schooling. In A. L. Arnesen, E. Lahelma, L. Lundahl, & E. Öhrn (Eds.), *Fair and competitive? Critical perspectives on contemporary Nordic schooling* (pp. 1–19). The Tufnell Press.

Arnesen, A. L., & Lundahl, L. (2006). Still social and democratic? Inclusive education policies in the Nordic welfare states. *Scandinavian Journal of Educational Research, 50*(3), 285–300.

Berntzen, E. (2017). State- and nation-building in the Nordic region: Particular characteristics. In O. Knutsen (Ed.), *The Nordic models in political science: Challenged, but still viable?* (pp. 19–44). Fagbokforlaget.

Bieber, T. (2016). *Soft governance, international organizations and education policy convergence: Comparing PISA and the Bologna and Copenhagen processes*. Palgrave Macmillan.

Cairney, P. (2016). *The politics of evidence-based policymaking*. Palgrave Macmillan.

Dahllöf, U., & Wallin, E. (1969). Läromedelsforskning och undervisningsplanering. Nordiska kommittén för pedagogisk forskning [Teaching material research and teaching planning].

Delhey, J., & Newton, K. (2005). Predicting cross-national levels of social trust: Global pattern or Nordic exceptionalism? *European Sociological Review, 21*(4), 311–327.

Dolowitz, D. P. (2018). Policy learning and diffusion. In H. K. Colebatch & R. Hoppe (Eds.), *Handbook on policy, process and governing*. Edward Elgar Publishing.

Elgenius, G. (2011). *Symbols of nations and nationalism: celebrating nationhood*. Palgrave Macmillan.

Espeland, W. (2015). Narrating numbers. In R. Rottenburg, S. E. Merry, S. J. Park, & J. Mugler (Eds.), *The world of indicators: The making of governmental knowledge through quantification* (pp. 56–75). Cambridge University Press.

Eyal, G. (2019). *Crisis of expertise*. Polity Press.

Government Decree (422/2012). (2012, August 1). *Valtioneuvoston asetus perusopetuslaissa tarkoitetun opetuksen valtakunnallisista tavoitteista ja perusopetuksen tuntijaosta [Government decree on the national objectives for education referred to in the basic education act and in the distribution of lesson Hours]*.

Grek, S., Landahl, J., Lawn, M., & Lundahl, C. (2020). Travel, translation, and governing in education: The role of Swedish actors in the shaping of the European education space. *Paedagogica Historica*, 1–22. https://doi.org/10.1080/00309230.2020.1769144

Grek, S., & Rinne, R. (2011). Fabricating Europe. In J. Ozga, P. Dahler-Larsen, C. Segerholm, & H. Simola (Eds.), *Fabricating quality in education. Data and governance in Europe* (pp. 19–31). Routledge.

Jacobsson, B., Lægreid, P., & Pedersen, O. K. (2004). *Europeanization and transnational states: Comparing Nordic central governments*. Routledge.

Lawn, M., Rinne, R., & Grek, S. (2011). Changing spatial and social relations in education in Europe. In J. Ozga et al. (Eds.), *Fabricating Quality in Education. Data and governance in Europe* (pp. 11–18). Routledge.

Lundahl, L. (2016). Equality, inclusion and marketization of Nordic education: Introductory notes. *Research in Comparative and International Education, 11*(1), 3–12.

Lundahl, L., Arnesen, A.-L., & Jónasson, J. T. (2018). Justice and marketization of education in three Nordic countries: Can existing large-scale datasets support comparisons? *Nordic Journal of Studies in Educational Policy, 4*(3), 120–132. https://doi.org/10.1080/20020317.2018.1542908

Massey, D. (1994). *Space, place and gender*. Polity Press.

Mejding, J., & Roe, A. (2006). *Northern lights on PISA 2003: A reflection from the Nordic countries*. Nordic Council of Ministers.

Nordisk Ministerråd. (1990). *Skola och skolförvaltning i Norden [Schooling and School Administration]* (Vol. 1990:8). Nordisk ministerråd.

Nordiska Ministerrådet. (1978). *Skolförvaltning i Norden. Översikt över utbildningsväsendets styrelsesformer i de nordiske ländarna (Kouluhallinto pohjoismaissa—Educational Administration) [School administration within the Nordic countries. Overview of governance forms]*. Nordiska Ministerrådet.

Nordiska rådet. (1974). *Utbildningsväsendets styrelseformer i Norden: nordiskt samarbete inom undervisningsområdet [The forms of government in the Nordic countries: Nordic co-operation in the field of education]* (Vol. 11/74). Nordiska rådet.

Opetus- ja kulttuuriministeriö. (2010). *Perusopetus 2020- Yleiset ja valtakunnalliset tavoitteet ja tuntijako [Basic Education 2020: Common and National Aims and Division of Teaching Hours]* (p. 1). Opetus- ja kulttuuriministeriön työryhmän muistioita ja selvityksiä.

Opetus- ja kulttuuriministeriö. (2012). *Tulevaisuuden perusopetus—valtakunnalliset tavoitteet ja tuntijako [Future Basic Education—National Aims and Division of Teaching Hours]* (p. 6). Opetus- ja kulttuuriministeriön työryhmämuistioita ja selvityksiä.

Ozga, J. (2009). Governing education through data in England: From regulation to self-evaluation. *Journal of Education Policy, 24*(2), 149–162. https://doi.org/10.1080/02680930902733121

Rizvi, F., & Lingard, B. (2010). *Globalizing education policy*. Routledge.

Roe, A., Linnakylä, P., & Lie, S. (2003). *Northern lights on PISA: Unity and diversity in the Nordic countries in PISA 2000*. Department of Teacher Education and School Development, University of Oslo.

Rose, N. (1991). Governing by numbers: Figuring out democracy. *Accounting, Organizations and Society, 16*(7), 673–692.

Sigurðardottir, E., & Harðardóttir, M. (2000). *Vision og virkelighed: evaluering af skoler i Norden: konference i Reykjavik, 11–12 November 1999 [Vision and reality: evaluation of schools in the Nordic countries: conference in Reykjavik, 11–12 November 1999]* (Vol. 2000, p. 504). Nordisk ministerråd.

Sivesind, K., & Wahlström, N. (2016). Curriculum on the European policy agenda: Global transitions and learning outcomes from transnational and national points of view. *European Educational Research Journal, 15*(3), 1–9.

Steiner-Khamsi, G. (2003). The politics of league tables. Journal of Social Science Education, Retrieved November 29, 2017, from http://www.jsse.org/2003-1/tables_khamsi.htm

Steiner-Khamsi, G. (2013). What is wrong with the 'what-went-right' approach in educational policy? *European Educational Research Journal*, *12*(1). http://www.wwwords.co.uk/pdf/validate.asp?j=eerj&vol=12&issue=1&year=2013&article=2_Steiner-Khamsi_EERJ_12_1_web

Steiner-Khamsi, G., Karseth, B., & Baek, C. (2020). From science to politics: Commissioned reports and their political translation into White Papers. *Journal of Education Policy, 1–26*. https://doi.org/10.1080/02680939.2019.1656289

Stone, D. A. (2016). Quantitative analysis as narrative. In M. Bevir & R. A. W. Rhodes (Eds.), *Routledge handbook of interpretive political science* (pp. 157–170). Routledge.

Telhaug, A. O., Mediås, A., & O., & Aasen, P. (2006). The Nordic Model in Education: Education as part of the political system in the last 50 years. *Scandinavian Journal of Educational Research, 50*(3), 245–283. https://doi.org/10.1080/00313830600743274

Törnberg, P., & Törnberg, A. (2019). Minding the gap between culture and connectivity: Laying foundations for a relational mixed methods social network analysis. In D. E. Froehlich, M. Rehm, & B. E. Rienties (Eds.), *Mixed methods social network analysis. Theories and methodologies in learning and education* (pp. 58–71). Routledge.

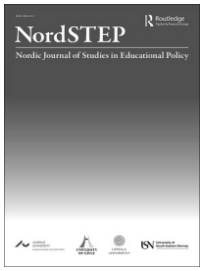
Wiseman, A. W. (2010). The uses of evidence for educational policymaking: Global contexts and international trends. *Review of Research in Education, 34*(1), 1–24.

Open Access This chapter is licensed under the terms of the Creative Commons Attribution 4.0 International License (http://creativecommons.org/licenses/by/4.0/), which permits use, sharing, adaptation, distribution and reproduction in any medium or format, as long as you give appropriate credit to the original author(s) and the source, provide a link to the Creative Commons licence and indicate if changes were made.

The images or other third party material in this chapter are included in the chapter's Creative Commons licence, unless indicated otherwise in a credit line to the material. If material is not included in the chapter's Creative Commons licence and your intended use is not permitted by statutory regulation or exceeds the permitted use, you will need to obtain permission directly from the copyright holder.



III



Routledge
Taylor & Francis Group

Nordic Journal of Studies in Educational Policy

ISSN: (Print) (Online) Journal homepage: www.tandfonline.com/journals/znst20

Constellation of trajectories and fast policy worlds: A spatiotemporal reading of experts' positions and social encounters in Finland's and Norway's recent curriculum reforms

Saija Volmari

To cite this article: Saija Volmari (2022) Constellation of trajectories and fast policy worlds: A spatiotemporal reading of experts' positions and social encounters in Finland's and Norway's recent curriculum reforms, Nordic Journal of Studies in Educational Policy, 8:3, 184-195, DOI: 10.1080/20020317.2022.2151105

To link to this article: https://doi.org/10.1080/20020317.2022.2151105

© 2022 The Author(s). Published by Informa UK Limited, trading as Taylor & Francis Group.

Published online: 25 Nov 2022.

Submit your article to this journal

Article views: 501

View related articles

View Crossmark data

Full Terms & Conditions of access and use can be found at
https://www.tandfonline.com/action/journalInformation?journalCode=znst20

NORDIC JOURNAL OF STUDIES IN EDUCATIONAL POLICY
2022, VOL. 8, NO. 3, 184–195
https://doi.org/10.1080/20020317.2022.2151105

Routledge
Taylor & Francis Group

OPEN ACCESS Check for updates

Constellation of trajectories and fast policy worlds: A spatiotemporal reading of experts' positions and social encounters in Finland's and Norway's recent curriculum reforms

Saija Volmari

University of Helsinki, Faculty of Educational Sciences, Helsinki, Finland

ABSTRACT

As evidence has become the predominant requirement for decision-making on policy in modern democracies, the importance of experts has increased tremendously. Education reforms are no exception. International organizations have gained power globally in national education policy and politics, particularly through the data they produce and the policy discourses they advocate. However, nationally appointed experts participate in the production of these discourses and advocate for policy ideas in their national context. This article examines the interplay of national and international through a spatiotemporal reading of eleven interviews with experts involved in Finland's and Norway's recent curriculum reforms. In their social encounters, experts exchange knowledge that does not show up in the written recommendations for reform but influences their content and focus. The author identifies three positions of experts as translators of policy knowledge that reflect the complexity of education policymaking processes which are rooted nationally, but increasingly influenced by international power structures and transnational social encounters. The author asserts that international organizations derive power not only from the data they produce but the meeting places they facilitate. Who is invited is partly a matter of geopolitics. However, the most exclusive places might only open for those ´at the forefront´ of education reforms.

ARTICLE HISTORY
Received 26 October 2021
Revised 16 November 2022
Accepted 18 November 2022

KEYWORDS
Time/space; globalization; evidence-based policymaking; policy translation; expert networks; global power structures

Introduction

Policymaking today is increasingly influenced by the 'evidence agenda' (Wollscheid et al., 2019, p. 273). Education reforms are no exception. The evidence agenda builds on the expectation that state authorities are to base their decisions on reliable and objective information, instead of just political values and agendas. In its simplest form, evidence-based policymaking means identifying what works and then applying it to solve a specific policy problem. The reality is much more complex, as the political scientist Paul Cairney (2016) points out, and decision-making processes are far from straightforward. These processes often involve a large number of actors and subsystems, each with their own rules, competing information and contested evidence, and decisions based on emotions instead of rationales (Cairney, 2016, p. 216). What counts as evidence also varies between the subsystems, for instance, the evidence considered valid may be different in science and politics (Cairney & Oliver, 2017).

Evidence-based or informed policymaking and the what-went-right approach have gained footage in education policymaking (Steiner-Khamsi, 2013) though to what extent evidence is actually used and what counts as evidence varies in different contexts (see, Karseth et al., 2022; Whitty, 2016). Wiseman (2010, p. 1) states that this progress can be traced back to two underlying beliefs, the first being that school knowledge is abstract and universal, and the second, that empirical evidence is the best way to efficiently measure learning. This development has increased the interest in international large-scale student assessments (ILSAs) that compare learning results with standardized indicators across contexts and are produced by international organizations, like the Organization for Economic Cooperation and Development (OECD). During the last two decades, international organizations have become prominent actors in education policy precisely through their data production machineries based on the two premises Wiseman identified. The OECD is particularly influential and exercises its soft power through standardized testing, international comparison, and benchmarking. Other such international organizations, including the European Union (EU) and the World Bank, also co-construct and promote policy discourses in education. (Morgan & Volante, 2016; Mundy et al., 2016; Niemann & Martens, 2018; Rizvi & Lingard, 2010; Wahlström et al., 2018) Political economists Jamie Peck and Nik Theodore call this policymaking that occurs 'in a knowingly comparative context, relative to recognized models and alternatives, and to a partly shared

CONTACT Saija Volmari saija.volmari@helsinki.fi Faculty of Educational Sciences, University of Helsinki, PO Box 9, 00014 Finland

© 2022 The Author(s). Published by Informa UK Limited, trading as Taylor & Francis Group.
This is an Open Access article distributed under the terms of the Creative Commons Attribution-NonCommercial License (http://creativecommons.org/licenses/by-nc/4.0/), which permits unrestricted non-commercial use, distribution, and reproduction in any medium, provided the original work is properly cited.

consciousness regarding leading fronts of reform' (Peck & Theodore, 2015, p. 224). Even in a knowingly comparative context of policymaking, national policymakers are still the ones to select the knowledge used in any reform; knowledge turns into evidence only after a national policy discourse is attached to it (Karseth et al., 2022; Volmari, Kauko et al., 2022; Volmari, Sivesind et al., 2022). National actors also participate in the production of policy discourses (Beech & Artopoulos, 2016), both in national and international settings. Nevertheless, education policymaking today is increasingly influenced by transnational flows and connections (Lingard, 2021a; Takayama & Lingard, 2021). The interplay of local and global, national, and international, has become a topic of huge interest among researchers of education policy and politics.

This article examines the interplay of national and international through the position of experts as policy translators in the recent curriculum reforms in Finland and Norway. Both these countries represent the Nordic political model. In the Nordic countries important political decisions are typically prepared in government-appointed expert panels (Holli & Turkka, 2021), and political decision-making is oriented on consensus (Baek, 2023). A large number of commissions with interest group representation are an integral part of the corporatist political decision-making culture of these countries (Christensen & Holst, 2017, p. 882).

I focus on three such government-appointed expert panels, one in Norway and two in Finland. These expert panels (in Finland called working groups and in Norway, a commission) had a similar focus and mandate, to propose renewed objectives of the national core curriculum in comprehensive education. Although their work may seem incremental, in both cases the panels greatly influenced the larger reform. As Baek et al. (2018, p. 24) argue, there is much to be learnt from incremental changes, although they tend to attract less attention amongst researchers than more dramatic reforms. Both curriculum reforms I examine here have been seen as infiltrated by the dominant discourse of twenty-first century skills and competences (Hilt et al., 2019; Mølstad & Karseth, 2016; Sivesind et al., 2016; Uljens & Rajakaltio, 2017). This is an excellent example of a discourse promoted by most international organizations (Anderson-Levitt and Gardinier, 2021; Nordin & Sundberg, 2021). Even though this discourse is recontextualized when it is incorporated into the national policy discourses, it increasingly influences national curriculum policies worldwide (Takayama, 2013, p. 68).

The data used in this article consists of eleven interviews with experts in Finland and Norway, conducted for the project Policy Knowledge and Lesson Drawing in Nordic School Reform in an Era of International Comparisons (POLNET), funded by the Norwegian Council (NRC 283457). The research questions of this article are: 1) How the members of these three expert panels perceived their position in their work on the panel as translators of policy knowledge? and 2) How did they describe the significance of the social encounters and particular places for the work of their panel in the transnational policy space? In other words, the article focuses on knowledge exchange and accumulation that does not show up as actual in-text references in the final written policy recommendations but influences the content and focus of these recommendations for reform.

To move beyond counter positions, and to capture the complexity and multiplicity of both space and time in current education policymaking and politics, in the data analysis I have employed spatiotemporal theories of post-structural geographer Doreen Massey et al. (2009), Massey (2007), 2005, 1994, 1991), political economists Peck and Theodore (2015), and sociologist Saskia Sassen (2013, 2007, 2002). To describe the process of knowledge production and circulation, I have chosen the concept policy translation. This concept stresses the dynamic nature of policymaking in which the different actors and context influence the final outcome, inspired by Clarke, Bainton, Lendvai and Stubbs, who have claimed that 'when policy moves, it is always *translated*: that is, it is made to mean something in its new context' (2015, p. 9).

In what follows, I first discuss the theoretical concepts and methods employed in this article. I then present the data and the findings. Finally, I discuss these findings in the light of the chosen theoretical concepts and present some concluding remarks.

Space, time and policy translation: Constellation of trajectories and fast policy fields

As evidence has become the predominant requirement for decision-making on policy in modern democracies, the role of experts has increased tremendously. Experts have become central to providing policy knowledge as the pace and scope of information flow is constantly escalating. It has become increasingly challenging to maintain a working knowledge of the vast amount of information, produced not only by universities but also by think tanks, consultancy bureaus and international organizations, to name a few (Maasen & Weingart, 2005; Moore, 2017). A key task of expert individuals and organizations today is to select appropriate evidence from this flow of information that fits the needs of politicians and policymakers (Stanziola, 2012; Wollscheid et al., 2019). Experts frequently bring

into the policy design process knowledge based on their own long working experience in the field (Holst & Molander, 2019; Krick et al., 2019). Critical voices have raised concerns about the increasing influence of the expert elite and their global networks on governments in contemporary democracies (Moore, 2017; Vibert, 2007; Zimmermann, 2009).Previous research on policy transfer and translation in education has revealed the power the international organizations like the EU, the World Bank and the OECD. These international organizations influence the national level decision-making and push their own agendas, for example, through their information production machinery built on the premise of comparing cases and identifying best practices (see, Grek, 2009; Niemann & Martens, 2018; Sellar & Lingard, 2013). In the future, then, high-level strategic planning and expertise in education policy may be outsourced to international actors and international expert organizations (Lawn et al., 2011). However, Marianne A. Larsen & Beech, 2014, p. 85) have argued that much previous research on education transfer has still been based on the idea that ideas are produced in one place and then transferred to another, on 'static definitions of transfer' (Beech & Artopoulos, 2016, p. 251). Education policy researchers have become increasingly critical of methodological globalism (Clarke, 2019; Lingard, 2021b; Takayama & Lingard, 2021) based on such static definitions, and the grand narrative of globalization as a pervasive force independent from the local conditions and actors (Bayly et al., 2006).

Much of the work on spatiality in education has relied on the post-structural geographer Doreen Massey, particularly, her definition of space as 'the social stretched out' (Massey, 1994, p. 2), which has been frequently cited to promote a new understanding of education and globalization. This definition represents just a fraction of Massey's rich and complex work on space as profoundly temporal. In fact, in her later work, Massey (2005) coined the concept time/space. I combine Doreen Massey's thinking with the theorizations of the sociologist Saskia Sassen, and political economist Jamie Peck and Nik Theodore, to explore the complexity of the national/international nexus through the positions of experts and their social encounters in the transnational policy space.

If nation state was previously perceived as the most obvious point of departure for analysing education policy and politics, present researchers appear to be a rather unanimous that research cannot anymore start from 'the assumption of the nation-state as a container, representing a unified spatiotemporality' (Sassen, 2002, p. 260). To avoid such methodological nationalism and the previously discussed methodological globalism, Saskia Sassen (2007, 2013) argues that the local and global levels of policymaking are not separate or layered. Instead, local and global are intertwined and constantly under construction. What we perceive as global is in fact produced within the local.

In terms of the interplay of global and local, Massey (2005) emphasized that globalization does not take the same form and have the same ramifications everywhere; to think so is not only incorrect, but potentially dangerous. What constitutes development is not the same everywhere, either. To think so detaches places from their history and blinds us to the diversity and multiplicity of relationships, histories, and realities of and within space. Massey (2005), (2009)) also asserted that global is not just out there: there is almost no singular local place that does not participate in constructing what we call the global. Hence, globalization is not a single, inevitable movement from the West to other parts of the world, but 'a making of space(s), an active reconfiguration and meeting-up through practices and relations of a multitude of trajectories' (Massey, 2005, p. 83). Space, as Massey defines it, is a 'product of interrelations and constituted through interactions' (Massey, 1994 p. 2). Particular places like cities she describes as characterized by 'throwtogetherness' (Massey, 2005, p. 140) and as 'constellation of trajectories' (Massey, 2005, p. 151).

Inspired by Massey, I read and employ these two concepts with the starting point that particular places are the material manifestations and compressions of space. Actors are somewhat coincidently thrown together in a place, but lines of global power structures and relations run through and meet in a place. Actors also bring their trajectories, their personal histories and experiences, their stories, their previous encounters, and the culture and history of the places they have been before, with them to a place. In a place, all these trajectories meet and form what Massey called a constellation of trajectories.

Massey invited us to examine the global sense of a place (Massey, 1991), using London (2007) and Hamburg (2005) as examples. People come to a 'global place' like London from all over the world, bringing their stories, their experiences, their histories, and connections with them. Massey described this as 'the world coming to it', but the other side of the global sense of a place is 'the lines that run out' of it, 'the power relations of all sorts that run around the globe and that link the fate of other places to what is done in London' (Massey, 2007, p. 7).

Although Massey pins her ideas on actual geographical locations, I believe her ideas to be useful in examining the relational space where global connections are made in policymaking. Peck and Theodore (2015) have approached these meeting places from the temporal point of view and coined the concept 'reconstituted fast policy worlds'. They use this

concept to describe the continuous monitoring, learning of and from others and global promotion of best practices. The word fast does not indicate velocity, but 'the intensification of long-distance (inter)connections, one that is revealed in the fortified reach and extended range of "mobile" policy frames, routines, and models, and one that takes account of the heightened immediacy, saliency, and indeed urgency of what have become increasingly compressed policymaking moments' (Peck & Theodore, 2015, p. xvi). Transnationalized policy discourses and cosmopolitan actors are both main characteristics of such fast policy fields. Successful policy models are made in these discourses and debates that identify best practices and set standards (Peck & Theodore, 2015, pp. 224–225). In terms of education, Beech and Artopoulos (2016, p. 256) point out that local experts both participate in the production of ideas and advocate them in their national context. These experts have connections that span from the national policy context to regional and international places of knowledge production, to form a transnational policy space, that is, 'networks cannot be traced back to one place but instead play out their influence in the global policy space that is constructed only partly within the national' (Volmari, Kauko et al., 2022, p. 142). In what follows, I examine precisely these transnational connections and the policy space they form.

Data and methods

Cases and informants

The aim of this article is to examine how the members of expert panels saw their previous experience and their social encounters in international meeting places had influenced the work of their panels and the final proposal for reform. In other words, I focus on the policy knowledge that does not show up in the text or reference lists of the final policy documents but influenced their content. The two cases for this study were the recent curriculum reforms of Finland and Norway. Both countries are Nordic welfare states, in which the state regulates the social sector, and education is seen as an important instrument for ensuring social justice (Arnesen & Lundahl, 2006; Lundahl, 2016). Expert panels are an essential part of Nordic political systems (Christensen & Holst, 2017; Holli & Turkka, 2021), and important political decisions are typically prepared in government-appointed expert panels (Holli & Turkka, 2021). In both Finland and Norway, the state led the curriculum reform process and appointed the expert panels.

The three expert panels chosen for a closer examination had partly similar mandates, to renew the national objectives of the curriculum for the comprehensive education. The reforms took place a few years apart. In Finland, the National Core Curriculum Reform was launched in 2010 and implemented starting from 2014, and in Norway, the Curriculum Renewal and Improvement Reform was launched in 2017 and implemented in 2020. In both cases, I examined the expert panels that were responsible for the specific policy recommendation reports that could be seen as the important first steps in these reforms. In the case of Finland, two consecutive working groups worked on the reform proposal, and in the case of Norway, one commission was responsible for the reform proposal. Both the Finnish working groups and the Norwegian commission are called expert panels here for the sake of readability. For increased anonymity, all informants are referred to as 'they/them', and interviews are referred to with a country code (FI = Finland and NO = Norway) and a sequence number.

The expert panels examined in the case of Finland were the working group that drafted the policy document *Basic Education 2020* published in 2010, and the working group that drafted the document *Future Basic Education*, published in 2012. Both documents were proposals for the objectives and distribution of lesson hours in comprehensive education, but the first document was never actually discussed in the Parliament, as it was discarded after political disagreements and the shift in political power after elections (Siekkinen, 2017). Nevertheless, the panel that produced *Future Basic Education* based much of its work on its precedent (Siekkinen, 2017; Volmari, Kauko et al., 2022). This document was eventually discussed and accepted in the parliament, and then served as a basis for the Finnish Government Decree 422/2012 on objectives and distribution of hours for the comprehensive education. The decree formed the basis for the national core curriculum and delegated the power to decide on the content of the core curriculum to the National Agency for Education. In the Finnish political system, such a decree is the equivalent to a White Paper. Four of the five informants interviewed from Finland were members of the 2010 working group and one was a member of the 2012 working group.

The six informants from the Norwegian reform were either members or part of the secretary of a panel called the Ludvigsen Commission. The mandate of this commission was to recommend overall goals, aims and structures for curriculum renewal (Volmari, Sivesind et al., 2022). The commission produced *The School of the Future. Renewal of Subjects and Competences*, an Official Norwegian Report NOU 2015:8, which is equivalent to a Green Paper in the Norwegian political system. This report was particularly important in the Norwegian reform

as a whole. It was one of the policy papers that previous research identified as most influential on the Norwegian curriculum reform (see, Baek et al., 2018; Hörmann & Sivesind, 2022; Steiner-Khamsi et al., 2020).

Although the mandate of all three expert panels was similar, the composition differed in ways that reflect the predominant policy-advisory systems in these two countries. Both the 2010 working group in Finland and the Ludvigsen Commission in Norway had stakeholder representatives in addition to civil servants. However, the commission in Norway had academic members but the working groups of Finland did not. This reflects the trend in Finland of drastically reducing representation of academics on government-appointed working groups in the 2010s (Holli & Turkka, 2021). In Norway, on the contrary, the participation of academics in the ad hoc commissions has risen during recent years (Krick et al., 2019). In line with this trend, the Ludvigsen Commission was headed by a university professor and its members included academics. The second working group in Finland consisted only of civil servants from the Ministry of Education and Culture.

Although all three working groups had mandates that were deeply rooted in national policy development, in both countries, global policy ideas and discourses had been circulating. Hilt et al. (2019, p. 385) claim that the report of the Ludvigsen Commission 'introduced and advocated ideas related to 21st century skills in the Norwegian context'. Similarly in Finland, Uljens and Rajakaltio (2017) state that the new core curriculum follows the key competencies promoted by the OECD. However, compared Norway, the skills and competences orientation is said to be less radical in the Finnish education policy context (Mølstad & Karseth, 2016; Sivesind et al., 2016). Nevertheless, both countries are interesting cases for examining the interplay of national and international in Nordic national curriculum reforms.

Data production and method of analysis

The data analysed in this article consisted of eleven in-depth expert interviews, approximately an hour each in duration. Each one of the informants had been involved in the work of one of the three expert panels and thus played a significant role in its policy formulation and text production. Conducted between April and October 2020, the semi-structured interviews followed the same guide comprising a wide range of questions related to the work of the expert panels, their use of knowledge and influence on the outcome of the respective reforms. Five interviews were conducted in Finnish, three in English, and three in Norwegian. All interviews were recorded and transcribed.The data was not originally produced specifically with spatiotemporal questions in mind, but to complement the extensive comparative, bibliometric network analysis conducted in the POLNET project. Nevertheless, as I read the data together with the spatiotemporal theories of Massey, Sassen, and Peck and Theodore, questions of construction of transnational policy space, national and international places of collaboration and social encounters, and compressed time and space of today's education policymaking, caught my attention.

Instead of starting with a mechanistic coding of the interview transcripts, I first kept reading the data and theory back and forth, in a dialogue with each other, inspired by the 'thinking with theory' approach suggested by Alecia Y. Jackson and Lisa A. Mazzei (2012). As I kept on moving back and forth between the data and the theoretical concepts, I was eventually able to find themes that specifically spoke about spatial, temporal and spatiotemporal aspects of the position of experts in the policy translation process and the transnational policy space in general.

In the second phase of my analysis, I utilized a dialogical thematization approach (Koski, 2011). In this phase of the data analysis, I paid attention to specific parts of the data that appeared to resonate with the chosen theoretical framework. I noted down any interview excerpts where the informants described their role in the expert panel, their professional background, and their own areas of interest in the panel's work. I also noted down any knowledge the informants said they had gained in connections or social encounters outside the work of the expert panel (seminars, meetings, conferences, and such) and how they evaluated the influence of these connections. I noted down all the parts of the interviews where the informants elaborated on these issues and read these extracts again with my interpretative framework in mind. This approach allowed me to identify themes that finally formed the categorization of positions that the experts held in the policy translation and creation process and illustrated the significance of specific social encounters and meeting places for the informants' work in their respective expert panels.

Epistemologically, this is a post-structural policy analysis in the sense that the aim was not to find static representations of reality, but to illuminate how policy space, policy knowledge and expertise are in a constant construction and state of becoming and emerge from and within the experts' social encounters. Although there are some comparative aspects in the results, the case comparison was not intended to detect similarities and differences between the two countries. The main aim was to read the informants' accounts and memories of the reform process as expression of policy space that is not restricted to nation states and geopolitical territories. My overall

motivation was to move away from both 'methodological nationalism' (Anthias, 2009; Dale & Robertson, 2009; Wimmer & Glick Schiller, 2002) and 'methodological globalism' (Clarke, 2019; Lingard, 2021b; Takayama & Lingard, 2021), to capture at least some of the complexity of the national/global nexus through these two cases of curriculum reform.

Results

Tacit knowledge, spatiotemporal expertise and three positions of experts as translators

As Beech and Artopoulos (2016) have pointed out, nationally appointed experts both participate in the production of ideas on the international level, and then advocate these ideas in national decision-making processes. In addition to this, they bring their previous experience and tacit knowledge into the policy design process (Christensen & Holst, 2017; Krick et al., 2019). In policymaking, different subsystems interact, and what constitutes as evidence can differ according to the subsystem an expert represents (Cairney, 2016; Cairney & Oliver, 2017). All these aspects of the process of evidence-based policymaking could be detected in the informants' accounts.

When asked about the work of the panels and their personal role and background, all informants were clear about the specific expertise they believed got them invited onto the expert panel. All emphasized their expertise in at least one of these areas; pedagogy or teaching and learning, relevant scientific research, or education politics and/or policy work. Most interviewed experts represented at least two of these fields, some several. All the academics had worked for governmental reform projects before. They explained that in this work, they combined both their substantial expertise in the research field they represented with their previous domestic or international experience in policy design and education reforms. One academic informant had worked as an adviser for the OECD. The informants were also well aware of their position and the positions of their colleagues as representatives of a certain organizations or subsystems. As a whole, the informants found it challenging to recall the origin of the knowledge they used as a panel member. Most of them had so many meetings and conferences yearly as part of their expert role in academia or government, that it was hard for them to pinpoint exact moments of exchange that were meaningful and inspirational. As one respondent put it, 'it is this big lump between one's ears that is in constant motion' (Interview FI01). A Finnish informant also pointed out that they did not only get inspiration in official, professional social encounters but also discussed ideas related to curriculum reform with their friends and acquaintances, even when bumping into each other on the street. This finding supports the claim that the national experts bring their whole personal history, all their encounters and trajectories, to the reform process, to their social encounters and to different places within the larger transnational policy space.

As I read the data, in the expectation that national and international policy spaces, and subsystems are intertwined, I identified three positions the expert panel members held in the policy translation process. All three positions have both temporal and spatial elements. They reflect the complexity of the education policymaking processes that are rooted in the national context, traditions, and decision-making culture, but are also increasingly influenced by international power structures, transnational social encounters and reform ideas promoted by international organization. These positions are that of a translator: 1) between present and future; 2) between subsystems; 3) between national and international policy spaces. The first position stresses the temporal aspect of reform work and the other two are characterized by spatiality that is also temporal. However, as Doreen Massey claims, time and space are intertwined. Hence all these positions have both spatial and temporal elements.

The first position, that of a translator between present and future, was more obviously related to temporality. It reflects the nature of reforms in general, the drive for an improved school system to create a better future. In the data, this position was less obvious as the informants were asked on their past, but not explicitly asked about the future. However, the informants themselves frequently brought up the future aspect of these reforms. The experts in both countries appeared to be very aware of their responsibility to the nation in the present, but also in the future. Two of them, one from Finland and one from Norway, mentioned how difficult it was to think ahead to what children in the unknown future would need to know and be skilled at:

> Working on and giving research-based advice on which competences are important for the future then in the future, it is quite a difficult exercise. Simply because we do not know exactly how it will be. (Interview NO04)

In their accounts, informants very much tied the future into the national context and the role of the nation state. The informants who brought up the future as something one needed to explicitly think of in any reform, did underline in other parts of the interviews that the reforms were part of a national tradition in curriculum design and education policymaking. The reform would influence the future of the schools but also at least implicitly the future of the

nation. This position was also linked to the past because most informants stressed that any reform is part of a longer tradition, and a continuation of national education policies and previous reforms.

Related to their background and the position they felt they had in working on the reform proposal, all informants explained how they needed to communicate information from one level to another, or from one subsystem (politics, academia, stakeholder organization) to another. This was the second position I identified from the interview data, the position as a translator between different subsystems. Academics said they were there to bring the research point of view to the panel work and communicate complicated theories into language that civil servants, politicians, and the public would understand. A politician explained how the party leader scolded them after they had expressed their own opinions at the panel that did not represent the party's official views: the leader had expected this politician to communicate the party`s aspirations for the reform to the expert panel. Civil servants explained how they brought in their expertise in communicating ideas in language that politicians and the public would understand. A representative of a stakeholder organization spoke about how they often needed to explain to lobbyists that education policymaking is based on long-term thinking and national traditions so one cannot drastically change it overnight. One of the civil servants also often had to explain to politicians 'that the direction of the education boat cannot be changed quickly, it is long term work' (Interview FI02). The fact that individual expert panellists represented not just themselves, but a bigger subsystem was sometimes experienced as frustrating:

> So there were situations where everyone in the meeting agreed. But then they discussed with their background group and then came back and said this will not do, I won't second this [...] It was as difficult as it can be. (Interview FI03)

One informant also explained how evidence did not mean the same thing to all participants and subsystems:

> For me [policy paper X], it's not evidence. It's a policy document that uses direction in a normative sense. So we were trying to balance what is kind of policy document, if you like, and what is kind of evidence for the teaching and learning part in different subjects. (Interview NO1)

This is in line with what Cairney and Oliver (2017) have claimed, that what counts as valid evidence varies between the subsystems.

The third role the panel members had was to act as a translator between the national and international policy spaces. Civil servants in particular seemed to play this bridging role. In fact, there was a stark difference between the stakeholder organization and political party representatives on the one hand, and the civil servants on the other. All civil servants interviewed in both countries worked for governmental organizations and had long experience working on the policy. They had been involved in several previous education reforms. Their expertise also stemmed from their social interactions and encounters that stretched out from the national to the international policy space, and their role was to act as an intermediary between the two contexts. Not only did the civil servants participate in the meetings and gatherings of the Nordic Council, the EU, and the OECD, several also had held high status and had responsibilities in the European Commission (EC), the EU and the OECD. One informant explained that their work in the EC had highly influenced their role as an expert in the Finnish national curriculum reform. At the same time, they could bring Finland's policy ideas and reform agendas to the education policy work of the EC. This intermediary role, they explained, was typical for civil servant expert. They described their role as follows:

> Q: Right. So it moves to both directions, from us to the international level and vice versa, through you?
> A: Exactly. It is a constant dialogue and this has for a very long time been the way we work. (Interview FI01)

Some of the Norwegian panel members were also very actively involved in transnational organizations or in cooperation with them, also in the EU and the EC, but particularly in the OECD. Two panel members were very well connected to the OECD: one had served there as an adviser, and another had been involved in its work for Education 2030. One informant also told me that a version of the panel's proposal was sent to the OECD for comment and the commenters praised this proposal for integrating the skills and competences in a context-specific manner. However, every informant in both countries underlined the influence of national context, decision-making traditions, and culture. Even though the informants from Finland at least implicitly referred to their responsibility to think of Finland, its school context and its future, most informants from Norway were very explicit about how their panel constantly took the Norwegian context into consideration. An interview extract from Norway demonstrates this:

> We were re-reading the Norwegian context into the document. And not making it just a kind of glossy White Paper, and I felt very good about that. Because you really stress this must be relevant for the Norwegian context, and not just kind of a global learning science policy report. (Interview NO01)

Most informants from the Norwegian panel emphasized that even if the discourse of skills and competences was naturally used by the OECD, the proposal the Norwegian panel had drafted was primarily based on scientific evidence and the national decision-making tradition. The

informants from Norway emphasized that information provided by the OECD was not just taken for granted but was contextualized to the Norwegian reality. According to one informant, information from the OECD was by no means more important than any other information:

> A: And so in this work it was the commission that, after all, looked at also some of the research-based reports that have come out of some projects. That looked at prerequisites for learning. So also OECD affiliated projects. The organization contributes through such collaboration to the focus on different areas and a number of reports are also prepared then. Also research reports. And so, also research analyses on the basis of international surveys, and so forth. They are an actor who set the agenda as well.
> Q: So it's at least an important basis to start with, or for the whole process maybe.
> A: Not more important than [any] other [knowledge] basis. (Interview NO04)

In this position of the translator between national and international policy spaces, the power structures that run through both spaces over time were maybe the most evident. The translator was not positioned between these two layers but within both simultaneously, and in constant dialogue with both.

Social encounters and meeting places

The informants from both countries mentioned two primary places of social encounters and meeting in the international level: the study visits abroad organized for policy learning, and meetings and seminars organized by international organizations. In Finland, the civil servants attended both types of social encounters, while the party members and stakeholder organization representatives stayed in the national domain. In Norway, such stark difference did not seem to exist, possibly because the informants were either civil servants or academics.

In both Finland and Norway, places for encounter based on skills and competences were central to the work of the expert panels. The informants from the Norwegian panel mentioned the work of the OECD on twenty-first-century skills and competences and Education 2030 when asked about meeting points and places of social encounters and interchange. One informant specified:

> There are several influential frameworks for the competence-based curricula, for example, the European Commission framework, and twenty-first-century skills and there are some companies, U.S.-based companies that also have frameworks for a competence-based curriculum, but when comparing those frameworks, I think in this case when it comes to Norwegian policymaking, the OECD framework is the most influential. (Interview NO02)

The members of the Finnish expert panel talked about the EC's influence on key competences, but they also mentioned the OECD as influential in this particular policy discourse. For instance, one informant mentioned that the closing seminar of the OECD's Schooling for Tomorrow was held in Helsinki at the time when the first working group was meeting. Both the EU and the OECD have a skills and competences agenda, and as one informant pointed out, the 'EU and the OECD are playing very much together when it comes to educational reforms' (Interview NO03). The different emphasis on each organization may partly come from the geopolitical relations of these two countries. Finland is a member state of the EU, while Norway is not.

As to places of social encounters, study visits are very common during a reform process both in Finland and in Norway. Both panels made study visits to other Nordic countries but also to countries that led in comparative rankings, like Singapore and New Zealand. In the case of Finland, part of the social interactions were delegations visiting from abroad to find the secret of Finland's PISA success. The PISA success also opened doors to places of knowledge production and exchange to which Finland previously had no access. All three civil servants from Finland mentioned the Global Education Leaders Program (GELP), an exclusive group of a handful of countries, as source of inspiration and information. GELP met twice a year in different parts of the world and discussed themes related to the future of education and the skills and competences needed in the future. The invitation to GELP seemed to be an honour for Finland, a door previously shut but now open due to PISA success. In addition to places that cannot be pinned down to a single country, the Norwegian expert panel made also a study visit to the headquarters of the OECD. It was described by some informants as influential, a study visit with a tailor made program to fit the commission's mandate and interests.

Even if such international organizations are not geographical locations, they can be seen as places where trajectories of individuals, nations and global power structure meet and merge. These places and the possibilities for social interactions they facilitate, using Massey's terminology, are characterized by a global sense of place, in the sense that the world is coming there in the form of experts gathering from all over the globe, and in a sense that the lines of global power structures run through them and permeate everything said and done there. Furthermore, access to these places is limited to member nations: Finnish informants mentioned that GELP is only open to only those leading at the 'fronts' of reform (Peck & Theodore, 2015, p. 224). Discourses, debates, identifying best practices and setting standards are part of a process in which one of the most powerful international organizations, the OECD, plays a significant role through their large-

scale comparative data and other tools of soft governance at their disposal: that is, successful models are not found, but they are made (Peck & Theodore, 2015, p. 225).

In the expert accounts scrutinized in this study, we can most certainly witness the influence of 'reconstituted fast policy worlds' (Peck & Theodore, 2015, p. xvi) based on continuous monitoring and learning from others. Even if the global skills and competence discourse was an underlying theme, a national idea of what constituted development to strive for in a Nordic welfare state seemed to guide the curriculum reform processes at least partly in Finland and Norway. Having said that, the places of social encounters facilitated by international organizations were infused with and built around discourses of universal expectations of what constitutes progress. Massey's claim that globalization does not have the same consequences everywhere may not anymore fully apply to education policy and politics. At the same time, as Sassen states, local and global are intertwined. The nationally appointed experts operate in both national and international environments and translate information between them. It is through the social encounters of these experts that the transnational policy space is eventually shaped and sustained.

Conclusions

In this article, I analysed eleven interviews with members of three government-appointed expert panels working on curriculum reform in Finland and Norway. I examined how the experts talked about their position related to the work of their respective panels and in the reforms as a whole, and how they saw their previous work experience and their social encounters had influenced their work.

I was able to identify three main translator positions the experts had in the policy design process: between present and future, subsystems, the national and international. These three positions mirror the complexity of the current decision-making environment that may be rooted to the national but is increasingly influenced by transnational cooperation and the dominant global policy discourses. Choosing the evidence on which to base policy is a constant compromise between the different subsystems involved in the policy-making process, and a matter of translating and modifying international evidence so that it serves and fits the national context.

In this process, evidence is contested even if all the members share a common understanding of the mandate and goals of a specific expert panel. What is considered as evidence varies between the subsystems, and the knowledge needs to be communicated understandably to all interest groups involved in the policymaking process, even sometimes after a consensus is reached. In many ways, expert panel work is a constellation of trajectories, not just the personal trajectories and histories of members thrown together to work for a common goal, but also the trajectories of subsystems these individuals represent. In terms of spatiotemporality, the expert panels could hence be described as a specific place within a larger policy space surrounding the work of these panels. Both the civil servants and the academics on the expert panels were extremely connected globally. A large part of their expertise stemmed from their international networks, and it could not be traced back to exact knowledge sources. In fact, many informants found it challenging to explain exactly where they draw from in their work as a panel member, for inspirational knowledge exchange also takes place in informal settings. The informants were able to name specific places in which they had gained and exchanged policy knowledge and inspiration, or fast policy worlds that compressed time and space in education policymaking. These were meetings, seminars, and specific policy projects of international organizations like the OECD and the EU.

Even if the individual panel experts may have been thrown together in these places of knowledge construction facilitated by international organizations, and they brought in their personal histories and individual trajectories with them, who is invited into these places of encounter is determined by global power structures and hierarchies. As such, the meetings at the OECD, the EC and the EU, and other transnational places within the global policy space, are thoroughly infiltrated by the global sense of these places. People come to meetings to discuss and create policy solutions and reform agendas and bring the trajectories of their nation with them. Who is invited is a matter of geopolitics and lines of global power structures that run through these fast policy worlds. Continuous monitoring of what others do, and global comparing and ranking like the ILSAs, construct and maintain these power structures and hierarchies. With these mechanisms and within the compressed policymaking moments in the larger transnational policy space, the division between insiders and outsiders is created and invitations to exclusive places of knowledge construction dealt out or denied. International education rankings produced by international organizations are not only a knowledge base used to legitimize reforms, but entry tickets to the most exclusive places only open to states that lead those rankings.

I have captured just a fraction of the complex fast policy worlds and constellation of trajectories in education, particularly since the data was not originally produced with spatiotemporal questions in mind. As such, the data had its limitations for spatiotemporal policy analysis. More research is

needed that asks initial questions based on spatio-temporal methodology. Doreen Massey advocated for this in her life work: if we take the challenges posed by a dynamic concept of space/time seriously, we might end up asking completely new questions. As a society, we might evolve towards a politics of place that starts from our interconnectedness. Then, we can begin to move both politics and research on it beyond any counter positions of time and space, us and them, and here and there.

Acknowledgments

The author would like to thank Kirsten Sivesind and Bernadette Hörmann from University of Oslo for the three Norwegian language interviews, and Kirsten Sivesind for her invaluable comments on the Norwegian case. The author would also like to thank the two anonymous reviewers of this article, Janne Varjo (University of Helsinki), Jaakko Kauko (Tampere University), Sirpa Lappalainen (University of Eastern Finland) and Tuuli From (Åbo Akademi) for their insightful comments that helped to improve this article tremendously.

Disclosure statement

No potential conflict of interest was reported by the author(s).

Funding

The work reported here was made possible through funding from the Nordic Center of Excellence Justice through Education (JustEd) at the University of Helsinki (Nordforsk project number 57741) and from the Norwegian Research Council (project number 283467).

Ethical declaration

The Norwegian Centre for Research Data AS (NSD) has assessed that the processing of personal data in the research project, on which the article is based, is in accordance with data protection legislation. This included assessing that the research project met all the required ethical guidelines.

ORCID

Saija Volmari http://orcid.org/0000-0002-3636-0855

References

Anderson-Levitt, K., & Gardinier, M. P. (2021). Introduction contextualizing global flows of competency-based education: Polysemy, hybridity and silences. *Comparative Education*, *57*(1), 1–18. https://doi.org/10.1080/03050068.2020.1852719

Anthias, F. (2009) *Methodological nationalism versus methodological transnationalism: Moving beyond the binary. Paper presented at the IMISCOE conference Stockholm.* http://www.socant.su.se/polopoly_fs/1.30452.1320939981!/FloyaAnthiaspapers.pdf, 9–11 September.

Arnesen, A. L., & Lundahl, L. (2006). Still social and democratic? Inclusive education policies in the Nordic welfare states. *Scandinavian Journal of Educational Research*, *50*(3), 285–300. https://doi.org/10.1080/00313830600743316

Baek, C. (2023). Expertise-seeking arrangements in education policymaking: A comparison between Norway and the USA.-. In D. Tröhler, B. Hörmann, S. Tveit, & I. Bostad (Eds.), *The nordic education model in context: historical developments and current renegotiations*, (pp. 196.214). Routledge .

Baek, C., Hörmann, B., Karseth, B., Pizmony-Levy, O., Sivesind, K., & Steiner-Khamsi, G. (2018). Policy learning in Norwegian school reform: A social network analysis of the 2020 incremental reform. *Nordic Journal of Studies in Educational Policy*, *4*(1), 24–37. https://doi.org/10.1080/20020317.2017.1412747

Bayly, C. A., Beckert, S., Connelly, M., Hofmeyr, I., Kozol, W., & Seed, P. (2006). AHR conversation: On transnational history. *The American Historical Review*, *111*(5), 1441–1464. https://doi.org/10.1086/ahr.111.5.1441

Beech, J., & Artopoulos, A. (2016). Interpreting the circulation of educational discourse across space: Searching for new vocabularies. *Globalisation, Societies and Education*, *14*(2), 251–271. https://doi.org/10.1080/14767724.2015.1025713

Cairney, P. (2016). *The politics of evidence-based policymaking*. Palgrave Macmillan.

Cairney, P., & Oliver, K. (2017). Evidence-based policymaking is not like evidence-based medicine, so how far should you go to bridge the divide between evidence and policy? *Health Research Policy and Systems (2017)*, *15*(1), 35. https://doi.org/10.1186/s12961-017-0192-x

Christensen, J., & Holst, C. (2017). Advisory commissions, academic expertise and democratic legitimacy: The case of Norway. *Science & Public Policy*, *44*(6), 821–833. https://doi.org/10.1093/scipol/scx016

Clarke, J. (2019). Foreword. In N. Papanastasiou (Ed.), *The politics of scale in policy: Scalecraft and education governance* (pp. v–xii). Policy Press.

Clarke, J., Bainton, D., Lendvai, N., & Stubbs, P. (2015). *Making policy mover: Towards a politics of translation and assemblage*. Bristol University Press, Policy Press.

Dale, R., & Robertson, S. (2009). Beyond methodological "isms" in comparative education in an era of globalisation. In R. Cowen & A. M. Kazamias (Eds.), *International handbook of comparative education* (pp. 1113–1128). Springer.

Grek, S. (2009). Governing by numbers: The PISA effect. *Journal of Education Policy*, *24*(1), 23–37. https://doi.org/10.1080/02680930802412669

Hilt, L. T., Rise, H., & Søreide, G. E. (2019). Narrow identity resources for future students: The 21st century skills movement encounters the Norwegian education policy context. *Curriculum Studies*, *51*(8), 1–19. https://doi.org/10.1080/00220272.2018.1502356

Holli, A. M., & Turkka, S. (2021). Tieteen muuttuva rooli korporativisessa neuvonannossa. Pitkittäisanalyysi tutkijoiden asemasta ministeriöiden valmistelutyöryhmissä 1980–2018. *Politiikka*, *63*(1), 54–81. https://doi.org/10.37452/politiikka98500

Holst, C., & Molander, A. (2019). Epistemic democracy and the role of experts. *Contemporary Political Theory*, *18*(4), 541–561. https://doi.org/10.1057/s41296-018-00299-4

Hörmann, B., & Sivesind, K. (2022). Structuring school reform policy with evidence: The inter-mediational role

of knowledge sources and arguments. In B. Karseth, G. Steiner-Khamsi, & K. Sivesind (Eds.), *Evidence and expertise in nordic education policies: A comparative network analysis of the nordic region* (pp. 183–226). Palgrave Macmillan.

Jackson, A. Y., & Mazzei, L. A. (2012). *Thinking with theory in qualitative research. Viewing data across multiple perspectives*. Routledge.

Karseth, B., Sivesind, K., & Steiner-Khamsi, G. (Eds). (2022). *Evidence and expertise in nordic education policies: A comparative network analysis of the nordic region*. Palgrave Macmillan.

Koski, L. (2011). Teksteistä teemoiksi – Dialoginen tematisointi. [From texts to themes –dialogical thematization]. In A. Puusa & P. Juuti (Eds.), *Menetelmäviidakon raivaajat* (pp. 126–149). Perusteita laadullisen tutkimustavan valintaan.

Krick, E., Christensen, J., & Holst, C. (2019). Between 'scientization' and a 'participatory turn'. Tracing shifts in the governance of policy advice. *Science & Public Policy*, *46*(6), 927–939. https://doi.org/10.1093/scipol/scz040

Larsen, M. A., & Beech, J. (2014). Replacing the old spatial empires of the mind. *European Education*, *46*(1), 75–94. https://doi.org/10.2753/EUE1056-4934460104

Lawn, M., Rinne, R., & Grek, S. (2011). Changing spatial and social relations in education in Europe. In J. Ozga, P. Dahler-Larsen, C. Segerholm, & H. Simola (Eds.), *Fabricating quality in education. Data and governance in Europe* (pp. 11–18). Routledge.

Lingard, B. (2021a). Globalisation and education: Theorising and researching changing imbrications in education policy. In B. Lingard (Ed.), *Globalisation and education* (pp. 1–17). Routledge.

Lingard, B. (2021b). Multiple temporalities in critical policy sociology in education. *Critical Studies in Education*, *62*(3), 338–353. https://doi.org/10.1080/17508487.2021.1895856

Lundahl, L. (2016). Equality, inclusion and marketization of Nordic education: Introductory notes. *Research in Comparative and International Education*, *11*(1), 3–12. https://doi.org/10.1177/1745499916631059

Maasen, S., & Weingart, P. (2005). *Democratization of expertise? Exploring novel forms of scientific advice in political decision-making*. Springer.

Massey, D. (1991). A global sense of place. *marxism today, june, repr*. In D. Massey (Ed.), *Space, place and gender* (pp. 146–156). Polity Press.

Massey, D. (1994). *Space, place and gender*. Polity Press.

Massey, D. (2005). *For space*. SAGE Publications.

Massey, D. (2007). *World city*. Polity Press.

Massey, D., Research Group, H. G., Bond, S., & Featherstone, D. (2009). The possibilities of a politics of place beyond place? A conversation with Doreen Massey. *Scottish Geographical Journal*, *125*(December), 401–420. https://doi.org/10.1080/14702540903364443

Mølstad, C. E., & Karseth, B. (2016). National curricula in Norway and Finland: The role of learning outcomes. *European Educational Research Journal*, *15*(3), 329–344. https://doi.org/10.1177/1474904116639311

Moore, A. (2017). *Critical elitism. Deliberation, democracy and the problem of expertise*. Cambridge University Press.

Morgan, C., & Volante, L. (2016). A review of the organisation for economic cooperation and Development's international education surveys: Governance, human capital discourses, and policy debates. *Policy Futures in Education*, *14*(6), 775–792. https://doi.org/10.1177/1478210316652024

Mundy, K., Green, A., Lingard, B., & Verger, A. (2016). *Handbook of global education policy*. Wiley.

Niemann, D., & Martens, K. (2018). Soft governance by hard fact? The OECD as a knowledge broker in education policy. *Global Social Policy*, *18*(3), 267–283. https://doi.org/10.1177/1468018118794076

Nordin, A., & Sundberg, D. (2021). Transnational competence frameworks and national curriculum-making: The case of Sweden. *Comparative Education*, *57*(1), 19–34. doi:10.1080/03050068.2020.1845065.

Peck, J., & Theodore, N. (2015). *Fast policy: Experimental statecraft at the thresholds of neoliberalism*. University of Minnesota Press.

Rizvi, F., & Lingard, B. (2010). *Globalizing education policy*. Routledge.

Sassen, S. (2002). Spatialities and temporalities of the global: Elements for a theorization. In A. Appadurai (Ed.), *Globalization* (pp. 260–278). Duke University Press.

Sassen, S. (2007). *Sociology of globalization*. W.W. Norton.

Sassen, S. (2013). When the global arises from inside the national. In T. Seddon & S. Levin (Eds.), *World yearbook of education 2013. Educators, professionalism and politics: Global transitions, national spaces and professional projects* (pp. 27–41). Routledge.

Sellar, S., & Lingard, B. (2013). Looking east: Shanghai, PISA 2009 and the reconstitution of reference societies in the global education policy field. *Comparative Education*, *49*(4), 464–485. https://doi.org/10.1080/03050068.2013.770943

Siekkinen, K. (2017). *Koulutuksellisen tasa-arvon diskurssit ja toimijat peruskoulun tuntijakouudistuksessa* [Educational equality discourses and actors' reform of the distribution of lesson hours in comprehensive school]. [Doctoral dissertation]. University of Jyväskylä.

Sivesind, K., Afsar, A., & Bachmann, K. E. (2016). Transnational policy transfer over three curriculum reforms in Finland: The constructions of conditional and purposive programs (1994–2016). *European Educational Research Journal*, *15*(3), 345–365. https://doi.org/10.1177/1474904116648175

Stanziola, J. (2012). Experts in search of expert power: Analysing CASE from an institutional perspective. *Cultural Trends*, *21*(4), 290–298. https://doi.org/10.1080/09548963.2012.726791

Steiner-Khamsi, G. (2013). What is Wrong with the 'what-went-right' approach in educational policy? *European Research Journal*, *12*(1). http://www.ords.co.uk/pdf/validate.asp?j=eerj&vol=12&issue=1&year=2013&article=2_Steiner-Khamsi_EERJ_12_1_web

Steiner-Khamsi, G., Karseth, B., & Baek, C. (2020). From science to politics: Commissioned reports and their political translation into White Papers. *Journal of Education Policy*, *35*(1), 119–144. doi:10.1080/02680939.2019.1656289.

Takayama, K. (2013). OECD, 'key competencies' and the new challenges of educational inequality. *Journal of Curriculum Studies*, *45*(1), 67–80. https://doi.org/10.1080/00220272.2012.755711

Takayama, K., & Lingard, B. (2021). How to Achieve a 'revolution': Assembling the subnational, national and global in the formation of a new, 'scientific' assessment in Japan. *Globalisation, Societies and Education*, *19*(2), 228–244. https://doi.org/10.1080/14767724.2021.1878016

Uljens, M., & Rajakaltio, H. (2017). National curriculum development as educational leadership: A discursive and non-affirmative approach. In M. Uljens & R. Ylimaki (Eds.), *Bridging educational leadership, curriculum theory and didaktik. Educational governance research* (Vol. 5), (pp. 411-437). Springer .

Vibert, F. (2007). *The rise of the unelected: Democracy and the new separation of powers*. Chicago University Press.

Volmari, S., Kauko, J., Anturaniemi, J., & Santos, Í. (2022). Evidence and expert power in finnish education policy making: The national core curriculum. In B. Karseth, K. Sivesind, & G. Steiner-Khamsi (Eds.), *Evidence and expertise in nordic education policy. A comparative network analysis* (pp. 115–148). Palgrave Macmillan.

Volmari, S., Sivesind, K., & Jónasson, J. T. (2022). Regional policy spaces, knowledge networks, and "the nordic other. In B. Karseth, K. Sivesind, & G. Steiner-Khamsi (Eds.), *Evidence and expertise in nordic education policy. A comparative network analysis* (pp. 349–382). Palgrave Macmillan.

Wahlström, N., Alvunger, D., & Wermke, W. (2018). Living in an era of comparisons: Comparative research on policy, curriculum and teaching. *Journal of Curriculum Studies*, *50*(5), 587–594. https://doi.org/10.1080/00110272.2018.1502814

Whitty, G. (2016). *Research and policy in education: evidence, ideology and impact*. IOE Press.

Wimmer, A., & Glick Schiller, N. (2002). Methodological nationalism and beyond: nation-state building, migration and the social sciences. *Global Networks*, *2*(4), 301–334. https://doi.org/10.1111/1471-0374.00043

Wiseman, A. W. (2010). The uses of evidence for educational policymaking: Global contexts and international trends. *Review of Research in Education*, *34*(1), 1–24. https://doi.org/10.3102/0091732X09350472

Wollscheid, S., Stensaker, B., & Bugge, M. M. (2019). Evidence-informed policy and practice in the field of education: The dilemmas related to organizational design. *European Education*, *51*(4), 270–290. https://doi.org/10.1080/10564934.2019.1619465

Zimmermann, E. (2009). Intellectual elites. In A. Iriye & P.-Y. Saunier (Eds.), *Transnational history. from the mid-19th century to the present day* (pp. 547–550). Palgrave Macmillan.