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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

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

ID	Location					Type of document				
	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	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%	

^aReferences 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

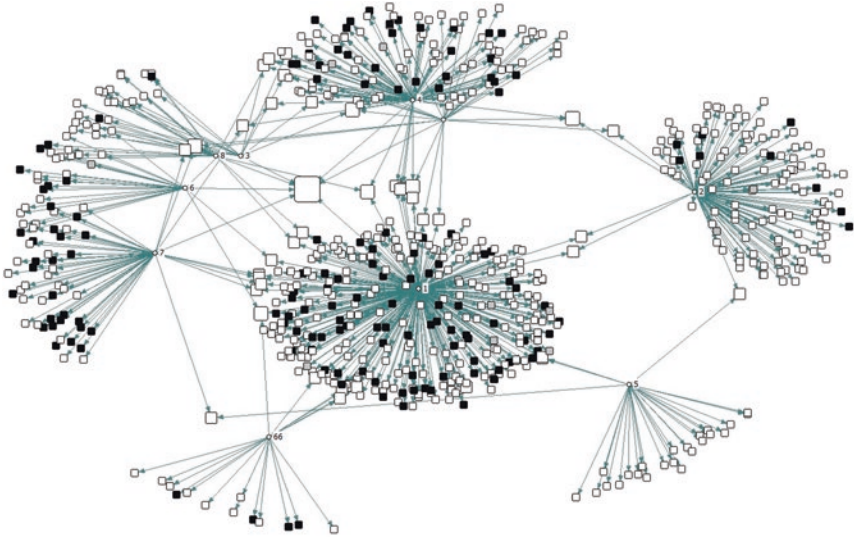


Fig. 5.1 Complete network structure. (Notes: Regional: gray, domestic: white, international: black; source: Circle; node size=in-degree centrality)

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.

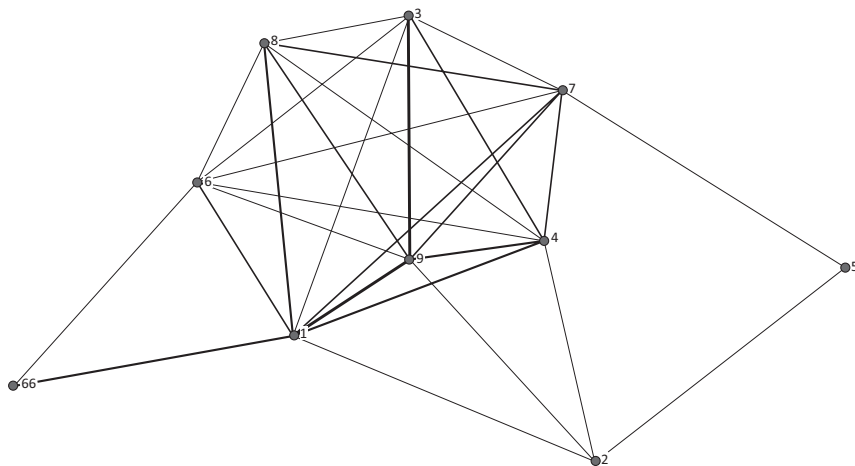


Fig. 5.2 Source document network. (Note: Link strength is based on the number of references shared by two sources)

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
Väljärvi, J.	8
Valtioneuvosto [Finnish Government]	8
Kupari, P.	7
Silverström, C.	7
Junntila, 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.

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