The Rhetoric of the 'Digital Leap' in Finnish Educational Policy Documents

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Abstract

This article discusses the rhetorical strategies in Finnish educational policy documents dealing with digitalization. The documents argue that the national education system is in dire need of digital technologies in order to modernize its pedagogy and secure national economic competitiveness. Finnish municipalities, schools, and teachers have high autonomy in implementing curricula, so there is a challenge to them to adopt digitalization at all levels of education.

Keywords: digitalization; educational policy; rhetorical analysis

Introduction

Since the beginning of the 2010s, Finnish education policies have placed great emphasis on the digitalization of the education system at all levels. The term 'digitalization' is used broadly to denote an intensified use of ICT in teaching and the communication infrastructure of the education system. While the current government (formed in 2015) will notably reduce school funding in the near future, it will fund the development of 'new learning environments' that mostly consist of digitalization measures. The Minister of Education and Culture has frequently referred to the 'digital leap' (Ministry of Education and Culture, 2015) to be taken in Finnish comprehensive schools. This means that schools should quickly modernize their ICT infrastructures with, for example, state-of-the-art tablets and smartboards. Moreover, government funding will be allocated to teacher education and inservice training to encourage innovative uses of ICT in teaching. Allegedly, the digital leap will facilitate the design of collaborative learning environments and raise motivation among pupils, which will result both in better learning achievements and in the nation's competitiveness in the global market economy.

The firm belief in the blessings of digitalization is not typical in Finnish education policies alone; indeed, the drive to digitalize education seems to be a global phenomenon. Political parties, interest groups, and tech companies are currently pushing the envelope to digitalize education, from the universities to day care centres (see, e.g. Cuban, 2013; Dussel, 2015; Haugsbakk and Nordkvelle, 2007; Nivala, 2009; Player-Koro, 2016; Williamson, 2016). These claims for educational reforms are buttressed by wider visions of the digitalization of the world economy. For instance, the OECD (2010b; 2015a) and the European Commission (2016) have recently claimed that digitalization has become a driving force in economic productivity and therefore they encourage their member states to enable the development of new business models and ICT infrastructure to secure national economic competitiveness.

While the Finnish vision of the digital leap follows international trends, there are also features that set it apart. By virtue of its success in the OECD's PISA studies in recent decades, the Finnish education system has been held up as an example of what works in education systems (see, e.g. OECD, 2004; 2010a). Finnish educational policy rhetoric has willingly received such good news and highlighted top quality teacher education and the high societal appreciation of teachers and schooling in general as contributing factors behind the Finnish 'PISA miracle' (Rautalin and Alasuutari, 2007; 2009; Sahlberg, 2011; Simola 2015). Thus, there is a tension between two initiatives in Finnish education policies – one highlighting Finnish exceptionalism and the other demanding radical reform.

In this article, we analyse the rhetoric of Finnish digitalization policy as an appeal directed at a specific audience – the heads of local education departments, principals, and teachers – in order to convince it of the necessity for a profound change regarding the perception and use of ICT in education. We ask how these texts engage in the rhetorical task of 'governing autonomy' (Saari et al., 2014), a feature of Finnish education policies that often abstains from direct and centralized interventions in municipalities and schools and at the level of the individual teacher. In other words, the audience should be rhetorically convinced of the necessity of digitalization and thus implement it willingly. We therefore probe what kind of rhetorical strategies are presented in contributing to this end and how this necessity is constructed and justified.

Global education policies as government at a distance

Since the 1990s, economic and cultural globalization has dovetailed with the global educational policy convergence that has been disseminated by large international organizations, such as the OECD and World Bank. The policy trends insist on the development of human capital and economic competitiveness through education. This is presented as an aim that can consolidate various public and private interests and serve the common good. (Rizvi and Lingard, 2010) This convergence has been coextensive with a transition from *government* to *governance*. This means that the administrative state now plays a receding role in policy formation and implementation. Education policies are now increasingly devised, dispersed, and implemented in self-organizing networks that entail both local, national, and international actors, and represent both public and private interests. (Lawn and Lingard, 2002; Lawn and Grek, 2012; Rizvi and Lingard, 2009: 117–121)

Although a lot of attention has been drawn to how global policy trends tend to homogenize curricula and evaluation in different countries, these trends may also entail highly mobile policies that 'flow' into new contexts, traversing geographical and cultural distances, while being flexible so as to adapt to local exigencies (Coulby, 2002; cf. Alasuutari, 2009). Moreover, this kind of governance functions as 'government at a distance' (Rose, 1999: 40–50), as it can operate across geographical expanses as well as traverse cultural and institutional boundaries without resorting to systems of centralized and hierarchical control. Government at a distance seeks to refrain from open interventions into the autonomous spheres (markets, citizens, media) of society. Instead, it operates in an 'enabling' fashion, cultivating loose mindsets and capabilities for self-organization among independent stakeholders (Miller and Rose, 2008).

Since the 1990s, there has been a widely expressed belief in EU policy rhetoric that supporting flexible, agile networking partnerships working from the bottom up is the key to securing economic growth and competitiveness in the Union (Barry, 2001: 88–92). In European education governance, this is discernible in the way the EU and the OECD have influenced policies across their member nations through supporting self-organizing national and international networks (Lawn 2006; Lawn and Grek 2012). For some decades, these aspects have been frequently expressed using the concept of the information society. This term was adopted to characterize post-industrial societies that are driven by flexible, decentralized networks of capital, the labour force, and information and communication technologies. These were seen as the key aspects in securing competitiveness in the global

economy (Barry, 2001: 88–92). The notion of the information society – and the central role of ICT positioned within it – is still discernible in the strategic papers of the OECD and the EU, which envision changes in social politics, the economy, and education policies. They also highlight the need for national, regional, and local strategies of ICT use that mobilize a wide array of public and private stakeholders (see, e.g. OECD, 2010b).

Finnish education policies opened up to the influence of the OECD and market-based policies in the 1990s. What has been peculiar to Finland is its adoption of the 'model pupil' stance towards the OECD – it often takes the organization's policy advice as obligations. (Rinne et al., 2002; Rinne et al., 2004) A case in point is the surge in Finnish educational policy texts at the turn of the millennium demanding the swift uptake of ICTs in the education system. This was further fuelled by the growing importance of Finnish IT companies (such as Nokia) to the Finnish economy. (Nivala, 2009)

There are some distinct national features that delimit how global education policy trends can be implemented in Finland, and the form that government at a distance must assume. Compared to other countries, the Finnish government exercises relatively loose control over national curriculum implementation, meaning that municipalities, schools, and individual teachers have their say in how the curriculum is realized (Hargreaves and Shirley, 2009; Sahlberg, 2011; Simola, 2015, Webb et al., 2004). Moreover, Finnish teacher education can select highly motivated applicants, as a career in teaching is on a par with medicine and law as one of the most aspirational professions in Finland (Simola and Rinne, 2015). What further elevates the status of the teaching profession and buttresses its autonomy is that every teacher (including class teachers in primary schools) is trained to Master's level. During their studies, teachers are encouraged to use theoretical knowledge and apply the curriculum at their own discretion in their day-to-day work (Kansanen, 2014; Simola, 2015; Westbury et al., 2005).

Rhetorical analysis of educational policy texts

The governance of self-organizing policy networks has recently been analysed by focusing on the ways alliances and links are forged between different actors to form a relatively stable network (see Gorur, 2013; 2015; Fenwick and Edwards, 2010).[i] Central to achieving these goals is 'intéressement' – the fabrication of shared interests and problems through persuasion and rhetoric (Miller and Rose, 2008: 34). Therefore, rhetorical strategies are necessary to articulate a problem in such a way that the audience can recognize the realization of their own interests in it.

Despite the attention paid to governing policy networks, rhetorical analyses of educational policy documents have thus far been rather scant (Edwards et al., 2004; Winton, 2013). We chose to use rhetorical analysis since we found it to be an efficient tool for analysing strategies whereby the Finnish education system is, despite its strengths, framed as being in dire need of an all-pervading reform qua the digital leap. Moreover, as the Finnish strategy of governing the education system is loose and decentralized, different levels of the system must be persuaded to accept the ethos of the reform and to act accordingly. Thus, the rhetoric of digitalization can be seen as a strategy of domesticating global policy trends (see Alasuutari, 2009), in other words moulding globally circulating rationales, models, and rhetoric to local – in this case national – exigencies (see also Coulby, 2002; Dale, 2000; Simola et al., 2013).

Our data consist of various kinds of policy documents concerning the digitalization of education. Some of these documents focus only on digital technologies, while others see digitalization as a part of the wider pedagogical reform of the Finnish education system. First, there are documents initiated by the Finnish government, including its ministries (e.g. Ministry of Transport and Communications, 2010; Ministry of Education and Culture, 2010; Finnish Government, 2011). These documents are labelled 'GD' (Government documents) in the citations. One document is administered by the Finnish Parliament (2013) and is thus labelled 'PD' (Parliament documents). Another single document is produced by the City of Helsinki (2015) and is labelled 'CD' (City documents). The rest of the documents are composed by various actors, such as think thanks, foundations (Lipponen and Rönnholm, 2016; Sitra, 2015), and the OAJ, the teacher's union (Trade Union of Education in Finland, 2016). These documents are labelled 'OP' (organization papers).

While operating through persuading and encouraging autonomous actors, these documents are themselves a product of network policies, since they express the views not only of government officials and interest group members, but also of educational leaders, academics, and ICT companies, such as IBM and Microsoft (see, e.g. Ministry of Education and Culture 2010). The aims and points of view of these various actors are not expressed separately, but in a seemingly univocal fashion. This also shows that the need for the digital leap in education has already been forged into a widely shared political agenda, and now this 'intéressement' is driven further through rhetorical strategies in policy texts.

When searching for research material, we focused on the most recent policy texts mentioning digitalization as part of the development of the Finnish education system. We found that from 2010, they started to appear more frequently than earlier and were produced by more various

agents (see also Parviainen, 2015). This was probably related to the increased circulation of digitalization initiatives in international policy rhetoric (in, e.g. the OECD and the EU), but also to the process of constructing the new national core curriculum for comprehensive schools. The construction of the curriculum was initiated in 2012, published in 2014, and became effective in 2016 (Finnish National Board of Education, 2014). Thus, while the texts often make sweeping claims about the whole education system, they often refer to the comprehensive school for case examples and particular points of focus (see, e.g. PD, Finnish Parliament, 2013).

These documents mainly stress two aspects of digitalization. On the one hand, they highlight the digital leap as building an encompassing ICT infrastructure in schools, with up-to-date hardware and software. On the other hand, they also frequently accentuate that digitalization means new learning environments and new pedagogies that enable individualized learning and transcend the limitations of space and time. This reflects 'the new language of learning' (Biesta, 2005; Haugsbakk and Nordkvelle, 2007) often used in digitalization rhetoric, where learning replaces teaching and the abilities of self-directed learners are emphasized (see also Kirschner and van Merriënboer, 2013).

Below, we analyse the rhetoric of digitalization as strategies aimed at a particular audience, in this case, those responsible for implementing the curricula. First, we characterize how the starting points of the rhetorical strategy are delineated – how certain exigences and common sources of agreement are laid out. Then, we describe both the dissociative and associative argumentation that tries to transfer the agreement from the starting points to the desired conclusion – the imminent need for an all-encompassing digital leap in the Finnish education system.

Exigence and agreement: setting the stage

To embark on argumentation aimed at an audience, the attention of the readers or listeners must be caught by pointing out an 'exigence': a question or a problem that should be addressed (Leach, 2000). Exigence is thus a central organizing principle that can be found in every rhetorical situation (Blitzer, 1968). However, as Winton (2013) states, it should be remembered that the problem – the exigence – is not something prior to the texts at hand, only waiting to be named, articulated, or written down. Rather, it is the texts themselves that construct the problem or the exigence in a rhetorical sense.

We found two prominent exigences around which the argumentation is structured. The first is that Finnish society is in a grave situation: its economic competitiveness is in danger. This is the starting point, which is easy to accept since the recession in Finland is enduring and quite profound when compared to other nations in Northern Europe. The other exigence is the claim that Finnish schools are living in the past and not utilizing the potential of the new digital technology of the information age. By forming a starting point where the current situation is seen as untenable, it is quite naturally assumed that something must be done.

As a first exigence, the policy documents analysed here frequently refer to the European Commission's (2010, 2016) visions of digitalization as paramount in maintaining economic competitiveness in the global economy (cf. Selwyn and Gorard, 2003). The Finnish policy texts claim that the whole education system must be renewed with the uptake of digitalization and annexed seamlessly to public administration and business (see, e.g. OP Lipponen and Rönnholm: 32–36; GD Ministry of Transport and Communications, 2010: 24–25). The foreword to the National Strategy for ICT in Education states this bluntly:

> It is the precondition of preserving Finnish competitiveness and welfare that our comprehensive education produces the best learning achievements in the world. To support best learning we must develop, utilize and apply latest technologies in daily instruction and learning. We need significant investments in comprehensive school ICT and its use in instruction and learning. (GD Lankinen, 2010: 8–9)

This reflects a general trend in Finnish policy rhetoric since the turn of the millennium (see Nivala, 2009). It has become common that whatever policy initiatives are presented, be they about health or early childhood education, it is customary to argue that they should serve national economic competitiveness. This is assumed to be a neutral goal that transcends particular interests and serves the common good (Kantola, 2010). In this, Finland has followed wider policy trends in Europe and North America. For instance, since the Lisbon Strategy, it has become customary to describe the EU as an 'economic space' in buttressing a wide array of different political exigences (Rosamond, 2002).

In addition to the economic factors, there is a prominent exigence to move away from outdated pedagogies and learning environments in Finnish schools. We found the following kind of perceptions recurring in one form or another:

> Why are our comprehensive schools and upper secondary schools still stuck in the age of ruled notebooks? The school might be the last island outside the network of our daily life. In classrooms pupils are seated in rows, they listen to the teacher's monologue, copy down text in their notebooks from the blackboard, and finally, learning results are measured in the form of essay responses. (OD Lipponen and Rönnholm, 2016: 9–10)

This strategy of arguing for the use of instructional technology and the need to update school culture has been recurring for several decades in both Finnish and international educational discourses (Cuban, 2001; 2013; Kiilakoski, 2012; Lehtinen, 2006; Young and Muller, 2010). For instance, the rhetoric of the 'information society' has stressed the possibility of bringing the education system up to date with the rest of society through the use of ICT (Nivala, 2009; Webster, 2006). Since the mid-1990s, the Finnish government has published several policy texts and programmes on information society development and the role of education in it (see, e.g. Ministry of Education, 1999; Ministry of Finance, 1995).

As in the earlier rhetoric of ICT, current Finnish digital leap texts present dramatic imagery of schools steeped in history and archaic working cultures. The 'old space' of education is depicted by static school class surroundings with poorly integrated technology. To emphasize this unbearable situation, it is repeatedly claimed that Finnish schools are the last bastion of Finnish society that has not embraced ICT as a normal part of daily routines. As a solution to the current predicament, digitalization will allegedly introduce 'new working methods' to schools and make the 'old ones' obsolete (OD Lipponen and Rönnholm, 2016: 32). This modern network-like 'dynamic space' is highly flexible, with ICT well integrated in all aspects of teaching (PD Kuuskorpi, 2013: 38; cf. PD Parpala, 2013: 51).

While the first exigence – the depression of Finnish society and the low level of productivity – is constructed around a widely recognized truth, the second might be contested. Portraying Finnish schools as thoroughly problematic and outdated is a risky move, since it might contradict the widely accepted rhetoric of the PISA miracle and the highly skilled teachers

behind it. In potentially contested starting points, facts can also be used to secure agreement (Perelman and Olbrechts-Tyteca, 1971: 67–70). Relying on research results is often considered a central argumentative strategy that is based on the idea of science as an authority (Killingsworth, 2005; Winton, 2013). When we found the use of research findings, the cited studies mainly concerned statistics about the meagre use of ICT in Finnish schools. Finnish policy documents repeatedly referred to the *2014 Education and Training Monitor Finland-Specific Report.* According to this report, the PISA results show that Finland has succeeded in 'combining high levels of performance with equity in education'. In terms of Finnish teachers' readiness to use ICT in school work, on the other hand, the same report (2014: 4) mentions that Finnish teachers are not only hesitant about the use of computers in daily school activities, they are the most reluctant ICT users of all educators in the EU countries. Apart from this research result, we found rather few references to scientific evidence in the Finnish digital leap texts.[ii] So, it seems that no further research on the benefits of digitalization on, for example, economic competitiveness and good learning achievements is considered necessary by ministries, think tanks, and lobbyists. (Cf. Haugsbakk and Nordkvelle, 2007; Kirschner and van Merriënboer, 2013; Selwyn and Gorard, 2003)

The second exigence, the backwardness of Finnish school, is also buttressed by constructing the speaker as considerate and expressing restraint and balanced judgement over his or her claims (Perelman and Olbrechts-Tyteca, 1971: 470). The policy texts repeatedly remind the reader that digital technology is merely a 'tool', so it does not remove the need for pedagogical expertise and reflection from teaching staff (see, e.g. OD Luukkainen, 2016: 3; OD Sitra, 2015: 12). This is probably thought to dispel any misgivings on behalf of the audience as to whether digitalization is considered of intrinsic value or the expertise and autonomy of teachers will be dismissed. Moreover, when laying out an initial agreement on the backwardness of Finnish schools, it would be wise to admit that there are also different kinds of schools, principals, and teachers:

> Luckily though, Finland now has more teachers and principals who have acknowledged [the inevitability of digitalization] and are dedicated to the cause. They can be found on Twitter with the hashtags #rehtorit (principals) #koulu (school) or #edtech as well as in different Facebook groups and internet discussion forums. Still, this is not enough to change the situation on a national scale. We need more of these teachers and principals. (PD Lonka et al., 2013: 94).

Placing the emphasis on the building of agreement is crucial, since later argumentation will be built upon this premise (Perelman and Olbrechts-Tyteca, 1971: 65–67). The skilful rhetorician manages to transfer the agreement from the premises to the conclusion(s), in this case to the approval of digital technology in the education system. Thus, the aim with an exigence is to achieve an agreement, as consensus is based on premises that both the speaker or writer and the audience accept. In our case, it is assumed that the reader accepts the exigences of the importance and possibility of securing economic competitiveness through education and the need to update school pedagogy. These are presented as presumptions and common values (Perelman and Olbrechts-Tyteca, 1971: 70–76).

Dissociative argumentation: Praise and blame

In the policy documents analysed here, a prominent strategy of trying to transfer the agreement to the desired conclusion is dissociative argumentation. This means that elements (such as concepts, ideas) that are ordinarily seen as interconnected must now be understood to be separate (Jasinski, 2001: 175–177; Perelman and Olbrechts-Tyteca, 1971: 411–412). As Finnish teachers are in *the dominant rhetorics often construed* as top-class in their profession and granted exceptional autonomy, certain aspects of the profession (i.e. the low use of ICT) must be separated from the indices of high expertise. So, instead of seeing the meagre use of ICT in teaching as being linked to the unquestioned domain of highly skilled, autonomous teachers capable of judging the need for smartboards and tablets in their daily work, this should be seen as an obvious flaw or attitude problem in need of immediate attention.

The policy documents engage in an epideictic way (also known as 'praise-and-blame speech') of addressing the audience. Peculiar to this speech type is consensus-orientation, which explains the praise. The blame part is used to make the audience accept the claims and bring about change. Thus, while it seeks to find common ground, it can also present criticism. The strategy uses praise as a tool to persuade the audience to accept less palatable suggestions (Church, 2010: 5; Edwards et al., 2004: 19; Perelman and Olbrechts-Tyteca, 1971: 48–52). Epideictic speech is clearly represented in the next sample:

> Finnish schooling and education is top class. This has been affirmed in several
>
> international evaluations (e.g. OECD, 2003, 2006). Nevertheless, as far as ICT is

concerned, the situation is not that favourable. Finland has invested greatly in equipment and networks, but school pedagogy and educational culture have hardly changed. (GD Ministry of Education and Culture, 2010: 8)

First, Finnish schools and teachers are praised for being top-quality with reference to the OECD's PISA verdicts. This draws on the aforementioned agreement, an assumption that would be accepted by the audience. But then again, they are also blamed for not accepting ICT. The argument then progresses to claim that professional educators should not oppose the use of ICT. Teachers who are reluctant about digitalization are even compared to 19th century Luddites who rebelled against industrialisation (OD Lipponen and Rönnholm, 2016: 18). The criticism is also buttressed by the fact that Finnish society has invested greatly in the latest technology, which is now sitting idle. This combination can be found – either explicitly or between the lines – in almost every document in our data.

Hannu Simola (2015) has listed several possible reasons for the Finnish PISA success since the turn of the millennium. One of them is particularly interesting with regard to digital leap rhetoric: Simola has cautiously stated that Finnish teachers are rather 'conservative' in their pedagogical thought and praxis. It seems that Finns' remarkable results are gained using old-school methods, which are based on the unshakeable authority of teachers and rather traditional tuition. Pedagogically, this associates with the image of the teacher standing in front of his/her students teaching and giving instructions without the assistance of state-of-the-art ICT.

This view finds surprising resonance in digitalization rhetoric, since teachers' reactionary attitudes are often seen as one of the major impediments to the digitalization process and the fundamental reason behind outdated pedagogies.[iii] However, the conclusion that Finland's high PISA rankings might be due to the alleged reluctance to utilize new technology is not considered. Of course, this is quite understandable given the intentions of the writers, whose aim is to persuade the audience to willingly take the digital leap. Now, one might well ask whether there may be very good reasons for the teachers' reluctance regarding the affordances of new technology, rather than them simply being selfish or self-indulgent Luddites. Could this reluctance perhaps be an indicator of high quality education? Moreover, one may well ask why exactly Finnish schools should follow the digitalization processes of the wider society. Could there be pedagogic value in remaining outside these developments?

It is clear that more rhetorical strategies must be used to back up the dissociative rhetoric of separating the high level of teacher's expertise and the low use of ICT from each other.

Associative argumentation: The network metaphor

In addition to dissociative rhetoric, the policy texts on digitalization mobilize an inverse form of associative argumentation. This rhetorical strategy connects phenomena that may otherwise seem disconnected (Perelman and Olbrechts-Tyteca, 1971: 190–191). The policy documents analysed here refer to broader – national as well as global – changes in the digital infrastructure of learning environments and the broader economy, thus making the reform seem not only a positive undertaking, but also inevitable if the Finnish education system is to remain top-class and secure Finnish economic competitiveness in the global market. To this end, digital rhetoric employs metaphors to build an image of a dynamic social reality demanding adjustment from the school, and thereby adds weight to the dissociative rhetoric depicted above.

Metaphor is a rhetorical trope in which two words are equated, often so that the more unfamiliar term is characterized by the more familiar (Perelman and Olbrechts-Tyteca, 1971: 398–399). 'Life is a journey' is a popular metaphor, where one notion (a journey, evoking images of movement in space across landscapes) is used to highlight certain qualities of the other (life). Metaphors provide a way of characterizing abstract phenomena and processes with meanings that seem concrete and clearly delimited (Lakoff and Johnson, 2008: 14).[iv] Making abstract and complex phenomena seem simple through metaphors is a common trait in political speech, as it can make processes of the political reality seemingly natural and inevitable (Charteris-Black, 2005; Edwards et al. 2004: 26–27; Martínez et al., 2001).

The most prominent metaphor in fabricating assent on the inevitability of digitalization is that of the network. This can be seen as an 'orientational metaphor' that allows for certain dimensionality and differentiation in social phenomena. Therefore, we can talk about being 'connected to' or being 'inside' or 'outside' of a digital network of Internet connections, computers, and mobile phones (Jones, 2004; cf. Lakoff and Johnson, 2008: 14–24). Metaphors can be presented in rhetorical strategies as a part of an agreement to characterize a state of reality that the audience is thought to adhere to. Thus, argumentation can develop as the further elaboration of the aspects of this metaphor (Perelman and Olbrechts-Tyteca, 1971: 402).

This use of the network metaphor has its background in the aforementioned wider changes in the governmental rationalities of the OECD and the EU. The OECD has accentuated the role of public-private partnerships and networks in taking over the role of the state in developing policies of ICT in education. This is argued as being necessary due to the sheer technological, economic, and pedagogical complexity of building ICT infrastructures (see, e.g. OECD, 2001: 8–9).

In the policy documents, the network metaphor highlights an identifiable dynamic according to which contemporary Finnish society functions. It totalizes the field of society as a complex set of material and immaterial interrelations with nodes that become increasingly connected. In Finnish digitalization rhetoric, network development is presented on the one hand as natural, pervasive, and inevitable: it is a process fuelled by the immanent forces of society, and the school system should accommodate itself to it. The policy documents highlight that digitalization is a constantly accelerating process of 'networkization', which leaves no area of society untouched. (OD Luukkainen, 2016: 3; OD Lipponen and Rönnholm, 2016: 24; GD Finnish Government, 2011: 1)

On the other hand, this natural development requires society to undertake active adjustment measures. It is claimed that as network development in digitalization is to be all-pervasive, the Finnish education system needs a national, all-inclusive strategy for the use of ICT. According to the policy documents, all aspects of schooling – from teacher education, inservice training, and school leadership to school architecture and school-business relations – should be realigned into a network connected by an ICT infrastructure (CD City of Helsinki Board of Education, 2015: 5; GD Ministry of Education and Culture, 2010).

While the use of the network metaphor highlights certain characteristics of society and schools, it directs attention away from others. The local contexts of municipalities and schools are often disregarded when promoting international and ubiquitous digitalization. This may obfuscate the fact that international policy trends like digitalization need to be domesticated into local – national, municipal, and school class – contexts. (Alasuutari, 2009; Dussel, 2015) In this way, attention can also be directed away from concerns of how already existing educational policies and traditional classroom pedagogies might contribute to good learning achievements.

Moreover, the uses of the network metaphor draw on the topographical descriptions of new learning environments. As Edwards et al. (2004: 73–75) note, the network metaphor in ICT discourses often accentuates the dynamic mobility of information in new communication spaces that transcend the limitations of space and time. In Finnish policy documents, digitalization opens the 'gates' and 'barriers' of 'closed' domains and enables learning to be realized anywhere, anytime (CD City of Helsinki Board of Education, 2015: 16; OD Lipponen and Rönnholm, 2016: 31; GD Ministry of Education and Culture, 2010: 24).

As Jo Frankham (2006) states, the uses of the network metaphor in education rhetoric often convey a sense of open dialogue and the boundless sharing of information. In the network space, teaching will be replaced by learning, where individual learners form an autonomous community of equals, sharing and acquiring knowledge (Edwards et al., 2004: 36–43; Haugsbakk and Nordkvelle, 2007; Selwyn and Gorard, 2003). This is also apparent in Finnish education policy documents on digitalization. In the following passage, the Finnish Ministry of Education and Culture envisions the network character of schools and the information society:

> Networkization inside and beyond the school has been a central part of the development of schools as part of an information society. Utilizing various learning environments offers the learner new possibilities to learn and to capitalize on what she or he has learned. Networkization, both nationally and internationally, enables the search, control, and distribution of knowledge with others. (GD Ministry of Education and Culture, 2010: 22)

Allegedly, digitalization brings a sense of community, open equal relations, and sharing to schooling. It also enables individualized, student-centred instruction. (GD Lankinen, 2010: 8–10;GD Ministry of Education and Culture, 2010: 8; OD Sitra, 2015; PD Parpala, 2013: 48–49)

The spatial aspect of the network is also used to direct focus on the schools and teachers remaining 'outside' the network and its dynamics. For instance, in some views it is stated that the autonomy of Finnish teachers may allow them to 'shut the classroom doors and continue as if nothing in the world has changed' (OP Sitra 2015: 7; see also Lipponen and Rönnholm, 2016: 8–10).

In summary, the policy documents argue that network development, and thereby digitalization, affects everything: it changes learning environments and enables the free flow of knowledge between the schools, families, school administrators, and business enterprises. Yet there is scant scientific research data offered to back up this claim. Instead, the network metaphor is used to draw these different phenomena and sites together into a seemingly natural and inevitable process. As Frankham (2006) has noted, the network metaphor provides a 'semantic fit' that can link together different spheres of society. It also operates on multiple scales while connecting them: it can be used to depict large changes in the global economy as well as the uses of ICT in the classroom, and it can create a sense of connection and inexorable change in all of them.

The use of network metaphors in these documents is hardly surprising, as they part of a wider strategy of non-centralized network governance. In this, policy rhetoric can function as a conduit in relaying the general ethos of network-like self-governance to other actors. As Peter Miller and Nikolas Rose (2008: 148) claim, government at a distance seeks to construct a 'multiplier effect' where self-governance is transferred from one instance to another. This generates a 'surplus' in the form of new actors. This kind of governance must be executed without resorting to governmental mechanisms that seek to make individuals and institutions passive and docile. Whatever the aims of governance, it is of the utmost importance that those who are governed can also recognize the realization of their own aspirations and free actions within it (Rose, 1999).

This may also explain the vacillation between the network as a figure of the current dynamic of society and the network as a blueprint, the ideal network society to come (cf. Frankham, 2006: 663–664). In Finnish policy documents, network development is a process happening spontaneously, but it is also a utopia yet to be realized that requires active interventions. In the former version, it is stated as an indubitable matter of fact, in the latter, it is a norm against which school policies are evaluated. In the Finnish context, this can be understood with regard to governing autonomous schools and teachers not by strict government fiat, but through persuasion. These actors must be convinced about the inevitability of change and they are implored to take action accordingly.

Conclusion

Finnish education policy rhetoric faces a peculiar challenge when importing international digitalization trends and the general strategy of government at a distance into the national

education system. Whereas many of the utopian promises of digitalization are familiar from larger international discourses, both the audience to be addressed and the measures to be taken should be considered in Finnish context. According to our analysis, the chosen strategy is to convince local administrators, principals, and teachers of the necessity of a decisive leap and to urge them to take measures to realize it. This is understandable as Finland has had a relatively decentralized structure for governing the implementation of national core curricula since the 1990s.

We found two starting points (exigences), which were constructed as truths that the audience would probably concur with, and upon which further argumentation might be based: Finnish economic competitiveness is in danger and Finnish schools are pedagogically backward. The former rests upon the conviction that the governance of the education system is tied to the economic competitiveness of the nation. This is constructed as a truth that requires little evidence in the form of factualization strategies, such as referring to research results. In the latter starting point, old and new pedagogical cultures are categorically juxtaposed. The old school is portrayed as a place oozing inefficiency, passivity, and teacher-centeredness, whereas digitalization enables the effortless generation and sharing of information, and the teacher's role is the facilitator of learning (cf. Kirschner and van Merriënboer, 2013; Selwyn and Gorard, 2003).

The latter exigence is obviously a controversial claim about a national education system famous for its highly esteemed teachers and success in international school achievement tests. Although Finnish PISA results are declining in the long term, the country still has a good name in education. To back up the latter claim, some reservations, caveats, and support from research findings were used. Otherwise, we found very scant references to scientific data (cf. Parviainen, 2016). For instance, the recent studies on the relationship between PISA results and the uses of ICT (see, e.g. OECD, 2015b; Steffens, 2014) were almost non-existent.

For the purpose of securing assent on the backwardness of Finnish pedagogical culture, the imagery of the top-class teacher must be dissociated from the low degree of ICT use. Moreover, the network metaphor is used to sketch the new open and pervasive learning culture brought about by digitalization. The network is presented as all-inclusive solution, which at the same time is a wish imposed from the above and something that takes shape spontaneously in schools. It seems that the change from static to dynamic culture – from the hierarchic structures of school and knowledge to boundless and limitless opportunities – is just awaiting the educators' acceptance.

In this digital leap imagery, the historical, ideological, and social structures of schools – including traditions and the practical and acknowledged know-how – were largely obfuscated. This may have the potential to create tension between the abstract, idealized promises of an education reform and the actual realities and challenges in the schools. This in turn may lead to the infamous 'reform generator', which portrays the school system as a perpetually deficient area constantly in need of development. While governance, organization, and curricula – but also social relations – in schools seem to have changed considerably, it seems that teachers still teach as they have been doing for decades, perhaps even for centuries. These structural changes have not changed teaching practices, the very core of the pedagogy. One could ask whether digitalization will be just another of these strategic changes that cannot permeate the current teaching and learning culture. (Cuban, 2013; Simola, 1998)

Through rhetorical analysis, we sought to highlight how the exigences and the arguments made on behalf of a 'digital leap' are rhetorical constructs, meaning that the exigences concerning the education system could be constructed otherwise. From the same premises, one could also conclude that Finland has, on the contrary, succeeded because of the meagre use of ICT and the low level of digitalization. It is not clear whether the rhetoric analysed here has actually convinced the audience of the necessity of the digital leap, although a recent survey of teacher attitudes reveals that Finnish teachers feel positive about using ICT in their teaching (OP Trade Union of Education in Finland, 2016). However, there are also prominent developments that have taken place in the last few years that deviate from the recent strategy of governing autonomy in Finnish digitalization policies. First of all, the new national core curriculum (Finnish National Board of Education, 2014) for comprehensive schools now dictates that digital technology should be used in every school subject. This has lead boards of education in some cities and municipalities (such as Finland's capital city, Helsinki) to plan strict quotas on the use of digital technologies in comprehensive and upper secondary school subjects (see, e.g. Aalto, 2016; Nironen, 2016). Thus, it is rather ironic that the Finnish rhetoric that hails autonomous principals and teachers may now be coupled with some strict norms that school leaders and teaching staff are obliged to follow.

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[i] These studies often draw on Actor Network Theory (ANT), especially Michel Callon's analyses of translation in the formation of networks. [ii] Some of the texts (e.g. Finnish Parliament, 2013) refer to individual case studies in which digitalization resulted in positive results. According to Parviainen (2015), this is a rather common strategy in Finland for validating uses of digital technologies in designing new learning environments. [iii] An exception is the digital leap publication of the Trade Union of Education, which highlights that Finnish teachers' attitudes towards ICT are actually quite positive (Trade Union of Education, 2016; Luukkainen, 2016). [iv] According to Lakoff and Johnson (1999), this follows from the fact that our use of metaphors is rooted in our corporeal way of experiencing reality. Even our most abstract concepts are based on metaphors that make use of our bodily, sensory, and tactile relation to the world.