



Digital Transformation and Discourses of Change Commodify Finnish Public Education

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Abstract

Ecosystemic cooperation among the state, municipalities, and commercial actors is evident in the public education of Finland. The edu-ecosystems can include firm interdependences, value creation, co-specialisation, and co-evolution with an aim to sell products and services to the global market as well as to open up markets in a particular country. Here, we examine the discourses through which commercial actors promote the change or transformation of public education. With support from the state, commercial organisations—whether for-profit, non-profit or private or state-run—have a strong agenda to change ‘old-fashioned’ education into one that better serves the twenty-first century work life. The state and municipalities are gatekeeping the businessing around education, but commercial actors would prefer more opportunities to cooperate with public education institutions. It is noteworthy that commercial actors are gaining greater access to public education policymaking through ecosystems, and hence, have greater influence in redefining and commodifying education. Yet, there is a lack of public conversation about the commodification of public education in Finland.

Keywords Digital transformation · Ecosystem · Commodification · Public education · Finland

Introduction: Ecosystemic Businessing around Digitalisation of Comprehensive Education

In Finland, education technology (EdTech) companies, edu-business organisations, and the state have a common goal of digitalising the education sector in terms of its policies, politics and everyday practices. Digitalisation, as ‘a current hypertrend

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in education' (Parreira do Amaral & Fossum, 2021, p. 306), or the technologically driven change in comprehensive education (7–15 year-olds), calls for reimagining what education is supposed to be in the twenty-first century. The task to reimagine digital transformation in education has been undertaken by various global actors from public and commercial organisations (e.g. Microsoft, 2015, 2018; UNESCO, 2023).

To investigate the role of private actors in public education in Finland, a small nation on the edge of Europe, we started working with Martin Thrupp, a scholar on critical policy sociology in Aotearoa, New Zealand, a similarly small nation with predominantly public comprehensive schooling. Martin became knowledgeable about education in Finland, and contributed to discussions also via Finnish publication (Thrupp, 2018), and tried to understand the emergent problems (Thrupp, Seppänen, Kauko & Kosunen, 2023). In analysing the intentions, and thus discourse formation, of edu-businesses, we interpreted that commercial and public actors work together to form an 'edu-ecosystem' to reform (digitalise) comprehensive education, and therefore, promote business in education (Seppänen et al., 2020; Seppänen, Lempinen & Thrupp, 2023). Therefore, it is important to study what is being reimagined in education from societal aspects, especially by commercial actors. In this study, we conducted interviews with 12 representatives of for-profit edu-businesses and non-profit organisations in Finland as part of the research project 'Hollowing Out of Public Education Systems? Private Actors in Compulsory Schooling in Finland, Sweden and New Zealand (HOPES)'¹.

The participation of commercial actors in Finnish comprehensive education classrooms transpires through not only ecosystemic work at the policy level but also through technology and related products and services. These products and services range from mobile phones (Paakkari, 2020) to computers and other devices and from learning materials to learning services (Seppänen et al., 2021). These transpirations mean that commercial actors can access comprehensive education classrooms both directly and indirectly. Business around (Seppänen et al., 2023) education technology is unsurprising, since technology is Finland's largest export industry and expected to remain at the forefront of the European new technologies industry (Lampela, 2019; Technology Finland, 2020). Finland's growing edu-business market and the edu-ecosystem containing and connecting both private and public actors (Seppänen et al., 2021) reflect the supra-national growth of for-profit actors in the Finnish education industry and global education industry (GEI) (Verger et al., 2016, 2017). The above description highlights how business around comprehensive education is contributing enthusiastically to privatisation *in* education rather than *of* education (Ball & Youdell, 2008), as the Finnish law of comprehensive education prevents profitmaking.

In an attempt to encourage schools to adopt something new while aiding innovation around products that are often called 'solutions' (Parreira do Amaral & Thompson, 2019), EdTech companies have persistently argued that schools and education

¹ The HOPES research project, funded by the Academy of Finland (2017–22), investigated private sector involvement in public education in three countries: Finland, Aotearoa New Zealand, and Sweden. The interview themes for the study were created collaboratively by the Finnish team (Piia Seppänen, Sonia Lempinen, Nina Nivanaho, and Iida Kiesi), the Aotearoa New Zealand team (Martin Thrupp, John O'Neill, Darren Powell, and Philippa Butler) and the Swedish team (Lisbeth Lundahl and Linda Rönnerberg).

systems are in the midst of a ‘schooling crisis’ (Selwyn, 2010b). The push to adopt these products is often described discursively as a form of digital hype or determinism (e.g. Hogan & Thompson, 2017; Parreira do Amaral & Thompson, 2019; Selwyn, 2010b, 2012; Williams, 1976), which is also observed in Finland. We argue that, in the Finnish context, the discourse of change or transformation by commercial actors aims to a) promote transformation for the sake of transformation and disruption; b) enable companies to co-operate more freely within public education, often for the purpose of EdTech product development; and c) imagine twenty-first century skilled workers as primarily technologically savvy and self-managed.

Businessing around, Privatising in and of, and Commodifying Finnish Public Education

The literature has noted state involvement in edu-business policy networks (e.g. Selwyn, 2010; Shiroma, 2014). However, the role of the state may vary considerably depending on, particularly, whether the nation’s education system is predominantly organised via public providers (as in Finland) and whether there exist private actors in the education system in addition to public actors. In Finland, in conjunction with its municipalities, the state organises nearly the entire comprehensive education system and is, therefore, the gatekeeper of comprehensive education. Not even the school choice policy movement, which landed in Finland in the late 1990s, was able to open the private sector provision to comprehensive schooling (Carrasco et al., 2015). The Finnish education system has been peculiar in the way it has been reluctant to adopt many globally traveling policies. For example, Finnish quality assurance and evaluation in comprehensive education differs from mainstream global evaluation processes, which are prone to marketisation processes in education (Simola et al., 2013). Simola et al. (2013) argued that this difference is due to two historical developments, which are also relevant in understanding privatisation in Finland: a path of dependency in egalitarianism challenged by market liberalism and deregulation in education to mimic global education policies. Furthermore, deregulation and decentralisation of the state, along with a shift to municipalities during the recession in the 1990s, led to cutting down expenses in education and a simultaneous shift of governance towards economic principles of saving. This twofold system of the state and municipalities was considered to bring considerable scope for decision-making through policy in Finland (Kauko & Varjo, 2008; Simola et al., 2013). Hence, privatisation *in* education is often hidden (see Ball & Youdell, 2008). The twofold system, along with the strong public education ethos portrayed in both Finland and abroad, can act as a facade with privatisation actions taking place behind the scenes. The strong ethos or illusion of a perfect public education has been strengthened by the suitable results achieved from the Programme for International Student Assessment (PISA). Privatisation *in* education can be seen at all educational levels through the ecosystemic private and public partnerships (Kiesi, 2023), as well as the commercialisation of education (Seppänen et al., 2023). Furthermore, the digitalisation of education is connected to its commodification (see Parreira do Amaral & Fossum, 2021). While education in itself is not private, there is a market emerging around the education system in Finland. There are examples, especially in higher and vocational

education, of a shift towards a business-funded series of projects targeting individual self-growth (Brunila, 2011). Furthermore, a hidden or shadow market in higher education is being formed around entrance preparatory courses (Kosunen, 2018). There are also developments in privatising education in early childhood education, which are offered by private companies. These developments collectively indicate the existence of state-regulated capitalism in the Finnish education sector. In particular, digital capitalism prompts new forms of cooperation and the potential for collective ownership and new common goods (Fuchs, 2021). Williams (1976, p. 34) pointed out that the ‘idea of public service must be detached from the idea of the public monopoly, yet remain a service in the true sense of the public service control,’ and further noted that ‘the most powerful organizations in the field govern technologies which is why the potential social benefits are lost in commodification’ (p. 151).

Technology-Driven Change with the Aim of Fixing Schools

Change is an evident part of life, as nothing is more certain than change. Yet, schools as institutions and the essence of schooling, where teachers teach and pupils learn together in an age-appropriate classroom, have remained remarkably similar despite pressures to renew. For decades now, there has been a strong movement for changes in education in terms of ‘innovation’ (Lubienski, 2006) and ‘modernized education’ (Ball & Youdell, 2008; Burch, 2009) through privatisation reforms, especially in the US, UK, Aotearoa NZ, and Chile. Furthermore, global commercial actors voice their opinions on ‘the old-fashioned’ schools. For example, companies such as Microsoft are not only pure PC service providers but also attempt to influence the education policy in Finland with an aim to progress ‘new pedagogies’ and ‘transforming education’ (Seppänen et al., 2021). These arguments about ‘old-fashioned schools’ shape the policyscape—what is being thought (Mundy et al., 2016, p. 8) about ‘modern’ school systems. The change towards ‘modern’ implies a profound use of technological innovation in education, or as Microsoft (2018) calls it, a ‘systemic and comprehensive’ application. Burbules (2016) called this ‘the unquestioned transformation power of technology’ discourse, where the commercial side of technology is ignored and digitalisation is an unquestionable fix (Selwyn, 2016a). This imaginary of digitalisation as an ‘unquestionable fix’ and the ‘only solution’ is problematic, since schools should be seen and portrayed as much more than merely a hub of and for technology. Such deterministic (Selwyn, 2012; Williams, 1976) and assertive (Selwyn, 2010b, p. 121) language is derived from marketing. Selwyn (2010b, p. 120) argued that the failing of schools because they are seen as old fashioned is not the fault of the individuals in schools or the schools themselves but a failure of communication derived from the powerplay among state policymakers, information technology (IT) companies, advocacy groups, parents, teachers, and students. Selwyn further explained that the failure of such communication means that technology in schools is socially shaped and that the ‘failing school’ arguments are often related to the profound functions of schooling in the twenty-first century rather than the hard-core subject knowledge of the technology companies, which is the technology itself and its functions (p. 120). This enables companies to cross the line (Mundy et al., 2016) from subject knowledge to

the pedagogical and political functions of schooling, and thereby, justify commercial involvement in public education and shape education.

Large-scale technology companies have recognised that even a minority share of the education market is highly profitable—both for sales in present-day schools and to secure future customers (Molnar et al., 2014). In line with commercial actors, many governments have aggressively argued for the benefits of technology, making vast investments in digital infrastructure (Burbules, 2016). The Finnish government is no different in this respect. They have argued that such investments not only improve schools but also create global competition that leads to further technological innovations. With the former Finnish governments from 2011 to 2019, innovation and digitalisation of education initiatives have become core topics in government programmes (Lempinen & Seppänen, 2021). However, those commercial actors who want to ‘fix’ education are the ones who will profit from finding a solution to fix it (Weller, 2015). One of the fixes revolves around twenty-first century skills. Related to new technologies and the fixing of education is the notion of change or transformation of education and the ‘digital disruption’ through re-schooling (fixing schools) and de-schooling (ending comprehensive education) that the commercial interests are promoting (Selwyn, 2015). The Finnish commercial actors’ digital disruption discourses relate to re-schooling rather than de-schooling, as Finnish comprehensive education has been promoted to have a great market value. Thus, twenty-first century skills have become a major theme in the Finnish comprehensive education curriculum, which is a benefit to EdTech companies and the digitalisation of education (Lempinen & Seppänen, 2021). There is a strong twofold argument for the need to modernise schools (Ball & Youdell, 2008; Burch, 2009) so that they can function even more effectively in twenty-first century Finland, and thus, the current schools are often portrayed as old-fashioned. On the contrary, Finland was ranked the highest in public sector digital services in the global Digibarometer 2020 (Mattila et al., 2020).

Educating Twenty-First Century Workers

According to Selwyn (2016b, p. 52), commercial interests such as Mozilla, the Gates and MacArthur Foundations, Pearson, Cisco, Intel, Microsoft, and Apple, have a hand in most of the recent high-tech education reforms and initiatives, including those related to twenty-first century skills. The United Nations Educational, Scientific and Cultural Organization (UNESCO) describes transversal or twenty-first century competencies or skills as being complementary to academic requirements and required ‘to achieve success’ in the future (Care et al., 2019). In the Finnish national curriculum (2016) for comprehensive schools, the so-called widely adapted skills are thinking and learning to learn; cultural competence, interaction, and expression; self-care and everyday skills; multiliteracy; information and communication technology skills; working life skills and entrepreneurship; and participation, influence, and building a sustainable future. These skills are promoted in schooling; thus, their subjectivity is based on taking care of and being responsible for oneself, a strong community, and entrepreneurialism—crafting an employable human for the future economy (Kinnari, 2020). Furthermore, these technologically effective (skills) and

emotionally affective (self-care and management) discourses of educational change have become mutually interchangeable. Schools aim to produce learners via an emotionally 'intense' techno-affective experience, which is instrumental for the consumer economy (Williamson, 2012). Twenty-first century skills define education as a narrow set of global skills independent of diverse cultural and curricular disciplines. In other words, these are subject to the development of global quality and efficiency measurement and governance (Miettinen, 2019), producing 'homeless' calculations of potentialities of the population that 'exclude and abject' (Popkewitz, 2020) (see also 'digital meritocracy'; Chang, 2020). Such twenty-first century characteristics have also been described as privileged individual abilities that underlie self-dependence and entrepreneurial thinking (Brunila, 2011; Selwyn & Facer, 2014). Individuals with these characteristics make great consumers—whose individual choices take precedence over solidarity (Selwyn, 2016c), leading to hyper-individualisation (Selwyn & Facer, 2014). The national curriculum (Finnish National Board of Education, 2016) for comprehensive schools in Finland supports these twenty-first century skills throughout the curriculum (Miettinen, 2019). Thus, comprehensive schooling has been somewhat shaped to facilitate the technologically driven new world, and there has been no need for alternative curricula to 'reshape education' (Selwyn, 2016b, p. 51).

For a technologically driven change (digitalisation) to permeate the entire system, the community of educationalists must facilitate the change. Paradoxically, at the same time, discourses promoting education technology have undermined educationalists' ability to facilitate changes in the education field (Facer, 2011). Undermining educationalists may shift the power from teachers and other educationalists to those who can better understand modern education. In his book *The New Meaning of Educational Change*, Fullan (2001), an education consultant to many large EdTech companies, writes that change will happen and is happening, so there is no need to resist it. Educational change is presented both as a means to an end and as an end in itself, where change is 'fun' and meaningful in its own right (Smith, 2016), p. 1).

To support the assumption that teachers are facilitators of change and to underline their role in modern education, the Trade Union of Education in Finland (OAJ) has established a 10-point plan for 'well-functioning digitalization' in the everyday life of teachers and school rectors (Hietikko et al., 2016). The OAJ points out that the traditionally broad autonomy of Finland's teachers must continue, that teachers should receive sufficient further education to use technology products effectively, and that the technologies should work for the teachers rather than the teachers working for the technologies. Overall, the use of technologies should aim to both improve the quality of work and increase the time available for carrying out a school's primary tasks (Hietikko et al., 2016). Reich (2020) argued that technology is, of course, part of the future and future classrooms; however, it will fail to disrupt, deliver to the hype, renew, or democratise education as long as the aim is to scale up innovation rather than making cumulative improvements in education.

Commercial Actor Interviews

For this study, in 2019–2020, we interviewed 12 representatives of various edu-businesses and organisations (referred to as companies hereafter) that promote edu-business in Finnish comprehensive schooling. The representatives of for-profit, non-profit, and private or state-run edu-businesses and organisations were chosen based on a previous analysis of documentation identifying groups of edu-business actors in Finland (Seppänen et al., 2020, 2021)². These representatives included (1) publishing and technology corporations of learning services (corporate): Sanoma Pro, Microsoft, Edita Publishing, and a rector who previously worked for Microsoft ($n=4$); (2) start-ups in the education industry (start-up): Eduten, KOKOA (now called Education Alliance Finland), 3DBear, and Seppo ($n=4$); and (3) organisations promoting edu-business (promoter): EduCloud Alliance (ECA), Hundred, Education Finland, and xEdu ($n=4$) (Seppänen et al., 2021). The interview questions focused on the participation of private/commercial actors in public education and on the cooperation between the private and public sectors in comprehensive education (students aged 7–15). All interviewees were aware that their statements could be directly connected to them personally (Seppänen et al., 2023).

Change or transformation itself was not a topic of the interview themes or questions, but the interviewees who represented edu-businesses highlighted the need for change in both education policy and practice and the solutions that serve this change. Although we do not use Lacan's discourse analysis (Bracher, 1994) here, we will borrow the notion of a master's discourse to explain that the need for change could be seen as a master's discourse, as it relates to and drives all discourses. The recurring theme of change in the analysis led us to the following research question: According to the interviewed commercial actors, what, why, and by what means and justifications should comprehensive education be changed or transformed. By addressing this question, we could identify the key actors involved in the edu-business according to the interviewees, which then led us to a clearer understanding of the role of the state and municipalities.

Both data-driven content analysis (Miles & Huberman, 1994) and a discourse analytical approach were adopted to analyse the interview data. As a result of the text-level content analysis, coded with NVivo, a data-based classification of the themes was formed; these were then used to describe what was said about the change and how it was discussed. In this research, the subjects of the discourse analysis were the statements of the interviewees—as they talked about their ideas, experiences, values, or any other aspects around change (Alvesson & Kärreman, 2000, p. 1146). In addition, 'Discourses of change' (Pietikäinen & Mäntynen, 2009, pp. 26–27) were the statements in which the interviewees created meanings and described change from their perspective and through which they continued to simultaneously produce and build the perceived need for change.

² This grouping is based on our previous research (Seppänen et al., 2020, 2021) in which we identified and characterised edu-business actors in Finland based on their history, size, and the products or services they offer.

The initial phases of the analysis were conducted in the language of the interviewees—Finnish—to include language and its various meanings, such as social meanings, as part of the analysis (Fairclough, 1989). The names assigned to the analysed categories and quotations were then translated into English. Next, the findings of the study based on the interviews are presented.

Findings: Changing Education

A discourse of change as a given passes through and intertwines with the following three discourses, which represent the commercial actors' statements. This overriding discourse of changing education underlines that the most important thing is to change and transform, for the cause of disruption.

Transforming Comprehensive Education into a 'Trendy Free-Market'

In this first discourse, the commercial actors' argument highlights the desire to transform comprehensive education into a 'trendy free-market': public education should be freed from regulation so that the market could function freely, as regulation is not considered 'trendy' or 'modern'. Furthermore, evident in the statements is the complex gatekeeping of education by the state and municipalities and the businassing around this gatekeeping by the commercial actors. To disrupt, change, and transform education on a large scale, the commercial actors would have to influence the municipalities or the state. However, the Finnish state regulates the possible profitmaking from education and participates in projects that aim to digitalise education (such as building a digital education platform) (Lehto & Neittaanmäki, 2020). Through ecosystemic cooperation, the state has offered commercial actors opportunities to participate in education at various levels, from early childhood to tertiary education. The only state regulation for municipalities working with commercial actors in comprehensive education concerns the restriction on profitmaking. However, working with private companies is encouraged, as indicated not only in the national curriculum but also by financial grants from the state, as mentioned in the below statement. At present, such co-operations are a key route to entering comprehensive education and building a market:

A significant opportunity is that, in recent years, public schooling in Finland has also begun to open up to such a good direction. These days it is possible to do, for example, innovation projects and try out new things. There are financial instruments for this, such as, the Finnish National Agency for Education's annual Innovative Learning Environments project call. During the previous [Sipilä] government [2015–2019], there was this kind of innovation, strategic, like a separate project grant and also other project grants, that could also be used for this kind of innovation project. Cooperation, typically with local education departments in different municipalities in Finland, is open-minded. (3DBear, start-up)

What is meant by changing to 'good direction' is that the education system is opening its doors to commercial actors by allowing product testing within schools. Product testing can happen, for example, in an EdTech laboratory where the class

visits, or a teacher testing a product as part of a lesson. The deregulation of municipalities and municipal differences in the methods of collaboration with commercial actors were mentioned in the interview statements. A classroom, school, or even the whole municipality can be encouraged to participate in testbed activities depending on the enthusiasm and interest of a single teacher, school management, or municipality. These differences in collaboration with the commercial actors can produce innovation and predispose pupils and teachers to commercialisation; however, the discrepancy among municipalities' educational practices can also lead to vast differences in how education is organised. This could, in turn, compromise the democratic values of education if some municipalities or schools become part of the commercial edu-ecosystems.

Recently, large Finnish publishing houses (Sanoma Pro, Otava, and Edita Publishing) have moved away from selling printed products and focused on offering 'learning solutions and services'. Three of the publishing houses, one of which is state owned (Edita), have been the key producers of Finnish education learning materials and desire to maintain their position in the established EdTech market, which has not gone unnoticed by the interviewed commercial actors. The publishing houses have long-established access to schools and teachers (here, supply chains) as the main learning material providers. This was explained by a representative of an education start-up business who noted the dominance of supply chains:

In Finland, we have a systemic problem in what happens after these innovation projects. This is a systemic, central process problem, which means that, where in other countries such as, the US, innovative actors can get a hold of these supply chains, this does not happen in Finland. And it means that those actors become established. Those big actors in the education markets, such as, Sanoma Pro or Otava in Finland or similar actors, which have the channels, they dominate the market, and innovation does not take place there. But it is very difficult to get into those supply chains. (3DBear, start-up)

The argument here also shows one way in which the Finnish comprehensive education market functions: the education market is dominated and organised by large actors in the field and overseen by the state. In the above statement, the commercial actor desires to change the 'supply chains' to make education a free market. Marketwise, the Finnish case is complex, as one of the large publishing houses is state-owned, meaning that it provides a public service as well as commodification, blurring the line between public and private. Another interesting point that the start-up actor underlines is that if the market is not free, innovation cannot happen, and that large publishing houses do not innovate because they dominate. This argument can be contested, as these publishing houses produce new products and services or innovate all the time. However, their market dominance means that the education system has not changed to facilitate free-market start-up upscaling.

The following interview statement exemplifies how the public system ethos becomes a commodity: the idea that public service should be transformed into an input and output kind of service, where the public works for the benefit of the market.

It posits that the teacher and the pupil are public servants in comprehensive education and should be helping with product development for a private company, as follows:

In a way, it's a matter of wanting something out of the system, something that you can use to develop your school further in the future, one way or another. So I think it is kind of old-fashioned way of thinking that we have public money and when [the] public does something, then someone needs to be charged. After all, this kind of co-development has been done a lot. And it should be in the customer's interest, too, that the services that come out of it are really something that has some value at the stage when you have to pay for it. (ECA, promoter)

There are many ethical considerations to be made about the use of school data as a product development, such as questions of data privacy and consent and the potential conflicts of interest, such as the use of public servants for commercial purposes and developing products that the schools need. In most of the interviewees' statements, there was evidence of commercial penetration into comprehensive education and a desire for business opportunities by the commercial actors, if the state would allow it. Furthermore, the above statements imagine the free-market approach to comprehensive education as a necessary, trendy, and vital part of the Finnish comprehensive education system. In this discourse, the whole public education sector would work for the benefit of the free-market ecosystem.

It Takes an (EdTech) Village to Transform Pupils into Twenty-First Century Workers

In this second discourse, the statements suggest that the most important function of schooling is the training of twenty-first century workers and that only EdTech companies co-working with schools can succeed in it. In these discourses, there is a common argument that schools are 'failing' to use technologies 'efficiently' and 'properly'. Therefore, private company involvement is argued to be vital in education, as noted by a company representative:

It takes a whole village to raise a child, so I would say a whole ecosystem is needed to ensure that good future and that change of learning. Because we are going through such a drastic societal change at the moment, due to this fourth industrial revolution, that it is a really tough thing. And it will mean that, if we do not take care that our skills will also increase and [also] human talent and creativity, then it might shake our society. We begin to talk about social peace. It's no longer a question of what jobs some people do. It's a question of terribly profound societal change. I would see that the question is not what Microsoft is doing, for example, with the municipalities about the new curriculum. But I see it as a bigger ecosystem issue that includes IT, for example, girls in technology. It has been researched, and there are things that need to happen in school, in the classroom, at home, and in industry. (Microsoft, corporation)

In this argument, the language is extremely deterministic, claiming that the technology and involvement of EdTech businesses as partners in schools can restore the

nation's social peace. This statement claims that schools are not capable of teaching twenty-first century workers, and in that sense, it *devalues* (Selwyn, 2010, p. 129) formal schooling. Interestingly, curriculum changes to whole schooling are portrayed as a minor issue, while girls' participation in technology is seen as a major issue.

Here, in the next statement, the start-up entrepreneur sees comprehensive school pupils from the viewpoint of future workers rather than defining schools as a place of social learning, solidarity, and building. The argument states that schools should open to companies, as the pupils are going to be their workers anyway:

...even though I am an entrepreneur, I am not any über-capitalist. But I see that it is, however, really good for the education sector, that it should discuss with the private sector actors and companies. After all, those companies recruit most of these pupils, and those are not like two separate sectors. And probably this dialogue also brings the aspect that companies have a better understanding of schools and schools have a better understanding of companies, and so on. And, of course, after all, those kinds of big, those commercial innovations, those are what the school needs. It needs good, good-quality textbooks. We have hinged on those for a long time. Then you need, why not even private schools? To challenge and spar [slang for encourage], to also develop the schools on the public side. Per se, I see that competition is good. Well, as for now, the more effective spread of innovations to schools is perhaps the key. (KOKOA, start-up).

In this above statement, the interviewee portrays a neoliberal path of privatisation and commodification of education in which innovative products first come to schools, which then slowly leads the way to privatisation of schooling.

The twenty-first century workers' skills described in the following statement by a Finnish actor promoting global edu-businesses constitute a mix of abilities that define an academically and socially highly competent individual who manages to self-navigate in the future world. The key twenty-first century competencies promoted by companies (e.g. competition) are grounded in neoliberal principles and values, and public education, as a testing ground, is likely to continue promoting these values and competencies to students through the products and strategies offered by private companies:

Probably skills that, if you read any research from almost anywhere in the world, [it] says that in the future working life you must have a more entrepreneurial attitude. This does not mean money, but that a person may be a little more self-guiding and, have more initiative. Cooperation skills are really important, as are creative thinking skills, tolerance of uncertainty, international cooperation, and empathy. Values like these are becoming more important, when I do not think at all that, like, academic skills are not needed. But some sort of balance, to aim to give a sort of like, good quality thinking skills, quality skills that help young people to cope in an uncertain world. But everything has to start from the best interest of a child. That is the core. (Hundred, promoter)

Such twenty-first century skills exist in the Finnish national curriculum. Highlighting these skills in the curriculum makes the argument for commercial companies to ‘help’ make organising education feasible. This second discourse, ‘It takes an (EdTech) village to transform pupils to twenty-first century workers’, highlights the ecosystemic work to ensure access to public education systems, guided by an ethos of schooling twenty-first century skills.

Respected Schooling System Offers Testing Grounds but Tradition Disputes Digitalisation

In this third discourse, schools in Finland are seen as a great testing ground for commercial actors due to the high belief in the quality of education system that is public. Statements by the interviewees emphasised the brilliance of Finnish schools—their master’s-level teachers, their strong PISA reputation, and equal, free, high-quality education throughout the country. The arguments portray Finnish education as ‘old-fashioned’, despite its high quality, which makes it ripe for product development. Because of these overriding dualities, the global rationale of ‘school crisis and old-fashioned’ schools shows that the arguments are chosen when they best benefit the speaker. Here, the ‘old-fashioned’ or traditional school is seen as coming in the way of digitalisation:

...this digitalization of schools, its biggest challenge is tradition. And that tradition of learning and schooling is really strong, [so] that bringing everything new in the middle of it then requires breaking the tradition somehow, and so on. And I see that myself, of course, that it is perhaps the biggest challenge in it, that schools could better utilize technology in learning. (KOKOA, start-up)

Education in Finland is argued to be of high quality because of its proven value as a test ground for products. To use the ‘Finnish brand’ of public education as a test environment, the Finnish teachers and well-ranked education system need to operate at an efficient level, as shown in the statement below:

...to remain a superpower in learning, we must also have these start-ups. After all, the education sector in Finland can be a particularly good place for start-ups, because if you think about the fact that teachers have a master’s degree here, they can give feedback on what works and what doesn’t work in the classroom or kindergarten or in adult education. Good research is done here [Sipilä] Government’s number one key project is to further digitalization. Finland is in the country rankings, in almost any rankings in innovations...we can be a testbed, we can be the first reference market there. And for example, we [an accelerator program] had three companies from Silicon Valley in Kielisauna [Language sauna] last fall, who wanted to come to Finland to develop. To get a reference, they have done that development work together with Finnish teachers. That’s how strong the Finnish brand is. (xEdu, promoter)

In another statement by a Microsoft representative, we can see how far into the public comprehensive education sector Microsoft is reaching in terms of different programmes it is running in Finland to digitalise old-fashioned education. Furthermore, Microsoft's statement is a direct illustration of the 'soft power' of a corporation's involvement in education decision-making:

...with teachers and, for example, their professional development, for instance, to utilize twenty-first century learning design in their lesson planning. We [Microsoft] have programs in which we work with principals and schools. We have a flagship showcase school. We support leaders in their schools' digitalization, but also in their leadership skills. Then we have a school for municipal decision-makers and ministerial decision-makers... What are the best practices, for instance, for transforming teachers' further training? We have come to such a conclusion that we need to understand more broadly and, in a way, help the decision-makers think about not only what, but how, to implement these things. After all, we have seen that throwing technology into schools is not changing anything. We are, after all, talking about such a profound change when it comes to soft skills, computational skills, and technology. (Microsoft, corporate)

The organisations that promote Finnish schools as their testing grounds, namely education business start-ups, whose business accelerators include state organisations (e.g. Education Finland), underline well-trained Finnish teachers and the excellence of Finnish schools. In contrast, commercial organisations already well-established in the education sector highlight the need for further changes in their statements, justifying their products and ensuring further business opportunities.

Discussion and Conclusions

We argue here that the *discourses of changing education* by commercial actors revolve around promoting a continuum of education as a market in Finland. In these discourses, it is argued, first, that once the state and municipalities continue co-development of education products with commercial actors, this promotes the development of the public education system into the market. Second, the change in education should involve commercial actors even more than before, as they see themselves as the only able educators of twenty-first century skilled workers as future employees. Third, schools are seen as a testing ground for products, and the teachers and pupils are promoted as workers and end customers of these products in ecosystemic public education for commodification purposes. All of the companies underline their importance and place not only in the education market but also in the education system. The large publishing houses have a solid position alongside the state as gatekeepers of the education publishing and technology market. This position is also noted by the other companies. Although Microsoft also has quite a solid position in the Finnish education system, which is evident through examples of ongoing projects in the field, they argue more aggressively for the change towards twenty-first century skilled workers through technological revolution than the publishing houses. Perhaps the publishing

houses are content with their position in the education market. The start-ups position themselves through their products and the marketing of the upscaling of these products. The promoters promote the start-ups and argue for Finnish education and the market to be better used for financial purposes and commodification.

The language used by the interviewees underlines fixing education (Selwyn, 2015) and is, by nature, deterministic (Selwyn, 2012; Williams, 1976) and economically driven, hence commodifying education. Furthermore, the discourses concerning the transformation of education should be treated as aspirational stories rather than ‘sober, objective and accurate descriptions of actual changes in education’ (Selwyn, 2016a, p. 11). Globally travelling discourses of transforming and fixing broken education (e.g. Burbules, 2016; Facer, 2011; Selwyn, 2010b, 2015) and the aim for digital transformation or disruption (Reich, 2020) have been presented by other researchers in other countries’ contexts. However, there are some peculiar features in the studied phenomenon that revolve around strong Finnish municipal and state power. The state regulating or deregulating through laws, curriculum, government grants, and programmes has led the education system to ‘open up’ to business around education and commodification. Together with large companies, the state produces a specific ecosystemic field of re-and deregulation for privatisation in business around, and commodification of, public education. Another peculiar feature is the use of some Finnish schools as innovation testing grounds for twenty-first century products and the use of pupils, teachers, and the education itself as a common good. The state is a key actor in the growth of the global education industry and plays a powerful role in linking policymakers (Selwyn, 2010a) with commercial businesses (Verger et al., 2016). These edu-business actors also construct policy knowledge and/or define what counts as education (Chang, 2020) in the ecosystems.

The state regulates, organises, and supports the commodification of education in Finland by state-regulated capitalism in the education sector. Digital capitalism prompts new forms of cooperation and the potential for collective ownership and new common goods (Fuchs, 2021)—or, in other words, public education products and production, hence commodification. This commodification and business around schooling can also lead to greater hierarchical divisions between classrooms and schools, affect pupils and teachers psychologically with a consumerist agenda, and take power away from the local community of schooling experts (i.e. teachers, specialist teachers, assistants, pedagogical experts, and rectors). Selwyn pointed out that ‘Any account of digital technology use in education needs to be framed in explicit terms of societal conflict over the distribution of power’ (2016a, p. 226). One of the societal conflicts evident in the Finnish commercial actor discourses involved the intertwining of the social-democratic welfare state and the commercial interests in public education (Nivanaho, 2024) and the blurred line between public and private (Kiesi, 2023). The Finnish education system is not free from market forces, yet it is still attempting to protect its goal of offering public welfare state schooling and engaging in edu-businesses to some degree at the same time.

Martin constantly reminded academics in education to play an active role in society: ‘Raising our heads’: Keeping a critical eye on policy and research’ (Thrupp, 2011). Thus, there should be an open conversation within the Finnish welfare state about whether public education should be a part of edu-businesses at all—and, if

so, under what ethical guidelines and terms. Alternatively, will the Finnish education system change quietly into a factory for technological devices and services with pupils and teachers as their crash test dummies?

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Declarations

Competing Interests On behalf of all authors, the corresponding author states that there is no conflict of interest.

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