London Review of Education





Special issue: Rising to the challenge of teacher education to prepare teachers for today's world

Research article

Research-informed teacher education, teacher autonomy and teacher agency: the example of Finland

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Submission date: 29 June 2022; Acceptance date: 25 January 2023; Publication date: 29 March 2023

How to cite

Chung, J. (2023) 'Research-informed teacher education, teacher autonomy and teacher agency: the example of Finland'. *London Review of Education*, 21 (1), 13. DOI: https://doi.org/10.14324/LRE.21.1.13.

Peer review

This article has been peer-reviewed through the journal's standard double-anonymous peer review, where both the reviewers and authors are anonymised during review.

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Open access

London Review of Education is a peer-reviewed open-access journal.

Abstract

Finnish education has received worldwide attention due to the country's performances in the Programme for International Student Assessment (PISA). Research investigating Finland's positive outcomes in the assessment has highlighted not only the strength of teachers, but also the rigour of Finnish teacher education. Finnish student teachers must undertake research-based teacher education culminating in a master's degree. The study of educational science, underpinned by empirical research, creates teacher-researchers. A Nordic/Continental view of educational governance allows for input control in terms of a national core curriculum in Finland, without surveillance of outcomes. The structure of the Finnish education system, characterised by decentralisation and the national core curriculum, entrusts teachers to make their own pedagogical decisions. This leads to autonomous and agentic teachers in terms of decision-making on the classroom, school,

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and professional levels, both individually and collectively. Finnish education, underpinned by social democratic values, views education as an agent of social change. Therefore, teachers enact social transformation through the agency enabled by research-informed teacher education. Finland's political consensus regarding education and societal trust in teachers further reinforces teacher autonomy and agency. This article argues that the rigorous research focus of Finnish teacher education cultivates autonomous and agentic teachers.

Keywords Finland; PISA; teacher education; teacher autonomy; teacher agency; research; master's degree

Introduction

Finland's positive outcomes in the Programme for International Student Assessment (PISA), administered by the Organisation for Economic Co-operation and Development (OECD), has drawn worldwide attention (Chung, 2019) and 'cross-national attraction' (Phillips and Ochs, 2004: 779). Research exploring the reasons behind these enviable outcomes has highlighted the strength of teacher education in the country (Chung, 2019, 2022; McKinsey, 2007). Furthermore, research has also indicated that teachers enjoy trust and autonomy in Finnish society, characterised by respect for teacher education, and for the teaching profession (Chung, 2019, 2022). This article therefore explores features of teacher education in Finland, and uncovers how this links with teacher autonomy, and ultimately with teacher agency. Finnish student teachers must undertake rigorous, research-based teacher education and earn a master's degree (Chung, 2022; Tirri, 2014). The article unpacks the concepts of teacher autonomy and teacher agency, with careful consideration of the Finnish context, linking them with teacher education in the country. The article thus argues that Finnish teacher education leads to teacher autonomy, which then promotes teacher agency, with the eventual goal of social transformation. Social democratic values underpin education in Finland, and teachers, through their teacher education, become 'agent[s] of social change' (Antikainen, 2010: 77). In other words, Finland's research-based teacher education gives teachers, as practitioner-researchers, the power and the possibility for social transformation in an increasingly complex world, through the agency developed during teaching careers.

Teacher autonomy and teacher agency in Finland

Teacher autonomy and teacher agency are often conflated and used interchangeably (Erss and Kalmus, 2018; Priestley et al., 2015). However, this article distinguishes between the two. Paulsrud and Wermke (2020: 710) refer to autonomy as what is 'actively exercised' by teachers, while teacher agency denotes 'the capacity of formulating possibilities for action'. Similarly, autonomy refers to the 'what' and agency to the 'how' in terms of teachers' decision-making (Paulsrud and Wermke, 2020: 711). Teacher autonomy also exists to uphold the ethical upbringing of children; teachers support their students' rights by preserving the virtuous purpose of education: the cultivation of human excellence (Weniger, 1929, 1952, as cited in Tröhler, 2012). This cultivation aspires towards social transformation, which, this article argues, needs teacher agency for its execution. Professional agency refers not only to teachers' role in society, but also to how they teach to shape society (Matikainen et al., 2018) in an increasingly unpredictable world. This article argues, therefore, that teachers need autonomy to become 'agent[s] of social change' (Antikainen, 2010: 77), and research-informed teacher education empowers teachers with this possibility. Therefore, Finnish teachers begin their careers as teacher-researchers, with the potential for achieving teacher agency and a larger agenda for social change.

Finnish teacher autonomy falls within its own unique 'ecosystem' (Kemmis and Heikkinen, 2012: 157). International, national and local contexts can shape perceptions of teacher autonomy; furthermore, teachers can perceive autonomy differently in different contexts (Salokangas et al., 2019). Teacher autonomy can be viewed as having an Anglo versus a Northern/Continental European divide (Erss and Kalmus, 2018; Paulsrud and Wermke, 2020; Salokangas et al., 2019). The governance of education

dictates the type of autonomy, or lack thereof, that teachers possess, stemming from geo-cultural views of professionalism. Continental nations view professions as state-building, and this facilitates a culture of trust and autonomy. People are entrusted to carry out their work autonomously, within set expectations and frameworks. Anglo countries, however, grant autonomy of work, but within a marketplace setting (Paulsrud and Wermke, 2020) of measurement and accountability. In other words, Anglo education systems utilise output control, while the European tradition prefers input control. Output control allows for decentralisation and autonomy of teacher education, teaching methods and curriculum, but with accountability measures for quality control. Input control utilises curriculum guidelines, but with pedagogical autonomy (Erss and Kalmus, 2018). England obviously follows the Anglo tradition, and Finland follows the European tradition, influencing different ideas of teacher autonomy in the two

Nordic education governance originally followed the European tradition of autonomy. The Nordic countries utilised the welfare state model to rebuild after the Second World War, and to implement values of equality, equity and democracy in their nations (Paulsrud and Wermke, 2020). However, decentralisation measures of the 1990s, for example, in Sweden and Finland, implemented Anglo-style marketisation into their education systems. Paulsrud and Wermke (2020) argue that the Swedish education system became more neoliberal than Finland's, and Finland has resisted the Global Education Reform Movement (Sahlberg, 2011) of accountability. While Sweden added more centralisation measures in the early 2000s to combat the perceived decline of the education system, Finland has avoided this, highlighting teachers' high social status and autonomy (Paulsrud and Wermke, 2020). In fact, Erss and Kalmus (2018: 97) argue that the European tradition with decentralised Anglo features 'have created a unique form of professionalism', a positive hybrid, so to speak, in Finland, upholding values of 'teacher empowerment, critical thinking, and autonomy'.

As teacher autonomy is a 'multidimensional context-dependent phenomenon' (Salokangas et al., 2019: 332), the scope of Finnish teacher autonomy needs framing and unpacking. This article argues that Finnish teachers feel autonomous in terms of self-governance and decision-making. This autonomy exists at the classroom, school and professional levels (Salokangas et al., 2019), and both individually and collectively (Paulsrud and Wermke, 2020). The article thus continues by delving into Finnish teacher education and the role that empirical research plays in forming first autonomous, then agentic, teachers.

The path to research-informed teacher education

Investigations into Finland's positive PISA outcomes since the assessment's inception in 2000 have highlighted the high quality of Finnish teaching (for example, Chung, 2019; McKinsey, 2007). Finnish teacher education utilises academic and educational science orientations, therefore prioritising theory over practice (Chung, 2022; Furuhagen et al., 2019). Instead of utilising long practice periods, Finnish teacher education emphasises research and the study of educational science, while viewing the career as practice (Chung, 2022). Finnish culture and society have always held teachers in high regard, but the 1971 Teacher Education Act catalysed teaching as an academic, research-based profession.

Research investigating Finland's PISA outcomes has uncovered respect for teachers within the PISA time frame (2000-present). However, teachers have always commanded much esteem in Finnish society. For example, historically, teachers were considered 'candles of the nation' (Niemi, 2012: 21; Tirri, 2014: 602) and the 'heart of the village' (Jyrhämä and Maaranen, 2012: 99). They were entrusted with educating the entire community (Chung, 2022); therefore, teaching 'signified high moral expectations' (Furuhagen et al., 2019: 13). The first teaching seminary opened in 1863 in Jyväskylä (Chung, 2022; Husso et al., 2006; Niemi, 2012; Uusiautti and Määtä, 2013), and supported local primary schools' responsibility for children's education, including literacy. Subject teachers earned a bachelor's degree in their subject, and, in the mid-nineteenth century, started receiving some didactical instruction (Chung, 2022; Furuhagen et al., 2019). Teaching seminaries later coexisted with teaching colleges, which promoted an academic approach to teacher preparation, more akin to teacher education than teacher training (Chung, 2016). In retrospect, at that time, the colleges catalysed the initial stages of academic teacher education in Finland, focusing on a 'scientific approach' and forming 'educational scientists' (Furuhagen et al., 2019: 14). Thus, education science began as an academic discipline, an approach which underpins Finnish teacher education today.

The Teacher Education Act of 1971 moved teacher preparation to the university, and from 1979, all teachers needed to earn a master's degree. The master's degree, required for all qualified primary and secondary teachers, purposefully unified teacher education and standardised a high level of education for all future teachers (Jakku-Sihvonen and Niemi, 2006; Niemi, 2012; Tirri, 2014). Teachers welcomed this streamlining and standardising of teacher preparation in Finland, as it raised the status of the teaching profession, especially with the inclusion of a master's degree as a requirement for teaching qualifications (Jyrhämä et al., 2008). This move from seminaries and teacher training colleges to the universities, in addition to the requirement of master's degrees for all teachers, highlights the transformation from teacher training to teacher education (Chung, 2016) in Finland. This article later argues that the ambitious and bold policy of mandatory master's degrees eventually emancipated Finnish teachers, and granted them the autonomy and agency that they enjoy today.

Finnish teacher education emphasises the academic underpinnings of educational science, providing the solid foundation for each teacher's education (Furuhagen et al., 2019): 'teachers' pedagogical thinking' (Krokfors et al., 2011: 3) and 'teachers' pedagogical knowledge' (Tirri and Ubani, 2013: 22). To elaborate, 'Pedagogical content knowledge is located at the intersection between content knowledge and pedagogical knowledge. Pedagogical content knowledge is unique to teachers and separates, for example, a science teacher from a scientist' (Tirri and Ubani, 2013: 24). Furthermore, the terminology of educational science gives academic rigour to the study of education (Säntti et al., 2018). Educational science includes a wide variety of disciplines viewed through an educational lens; the subject is now firmly based in empirical research. This cultivates teachers as 'research-based educationalist[s]' (Furuhagen et al., 2019: 5). This article argues that the empirical basis of educational science satisfied policymakers who advocated a theory-based teacher education, and also those who wanted to keep a more practical, teacher training approach. Teachers' pedagogical thinking and educational science, and the role they play in teachers' research orientation and resulting teacher autonomy, is discussed later in the article.

Finnish teacher education views future 'teachers' work as constant research' (Uusiautti and Määtä, 2013: 7). Student teachers study educational research methodology as part of their degrees, and all qualified teachers have eligibility for doctoral study (Uusiautti and Määtä, 2013). Teacher education instils these empirical research underpinnings so that, during their careers, teachers can envision 'the meaning of theory in practice', the 'theoretical viewpoint', and can adopt a 'teacher-as-a-researcher attitude' (Säntti et al., 2018: 12). Furthermore, this allows teachers to critically reflect on their work (Furuhagen et al., 2019), which plays an integral role in teacher autonomy and agency. Critical reflection on one's own teaching requires a deep understanding of theory (Jyrhämä et al., 2008), supported by a rigorous academic background. The consolidation of research-informed teacher education coincided with the release of the first PISA scores at the turn of the millennium, externally validating the academic model of Finnish teacher education.

Current teacher education

The current teacher education system has garnered much 'cross-national attraction' (Phillips and Ochs, 2004: 779) due to research investigating the reasons behind Finland's positive PISA outcomes (Chung, 2019). The popularity of teaching, and especially primary teaching, has also been well documented; for example, most primary teaching programmes only accept about 10 per cent of applicants (Chung, 2022; Koski and Pollari, 2011). It has therefore been argued that this popularity is a critical factor in promoting quality in the teacher workforce (Koski and Pollari, 2011). Remarkably, it is now 'easier to be admitted to the faculties of law or medicine at the University of Helsinki than it is to gain admission to the [primary] teacher education programme' (Tirri, 2014: 602). It could be argued that the high selectivity of many teacher education programmes supports the culture of trust in Finnish society, also elevating teacher autonomy in Finland. Some secondary education subjects, however, have trouble recruiting, and therefore do not enjoy the same selectivity as primary programmes (Chung, 2022). Teachers in vocational education need to have the highest possible qualification within their discipline. Vocational teachers must have at least three years' experience within their field of study, as well as study of pedagogy (Chung, 2019). Teacher education programmes are now hosted by 'eight research-intensive universities', which require that 'all senior lecturers must have a PhD' (Maaranen et al., 2019: 215), illustrating Finland's strong commitment to research-based teacher education.

However, even in a research-heavy teacher education programme, student teachers need to practise. In Finland, most teaching practice takes place in a normalikoulu, or normal school. These 'lab schools' differ from municipal schools, as they are affiliated with universities. Teaching practice in Finland has strong connections to theory and research; therefore, student teachers must connect their teaching practice with current educational research (Chung, 2022). Normaalikoulu teachers, with a high level of postgraduate education, facilitate a rigorous in-service education (Koski and Pollari, 2011). Many teachers, even 20 per cent in some schools, have a doctoral or a licentiate degree (Jyrhämä, 2006; Koski and Pollari, 2011), which is, in Finland, halfway between a master's degree and a doctorate (Koski and Pollari, 2011); this fosters the aforementioned rigorous, research-informed supervision. The research underpinnings of teaching practice make the role of mentor quite demanding, justifying mentor teachers' high level of education. For example, 'The idea of research-based teaching makes it especially challenging for supervisors to help student teachers become reflective professionals in the area of teaching' (Jyrhämä, 2006: 64). Mentor teachers need to critically analyse their own practice, and to juxtapose their style with the most recent research and teaching strategies; this allows them to educate the next generation of teachers. Both mentor teachers and student teachers utilise a 'common conceptual language' in order to promote this research-informed teaching and dialogue concerning teaching practice (Jyrhämä, 2006: 64). The teaching practicum, therefore, allows student teachers to develop a 'personal practice theory' in order to integrate theory and practice (Mouhu, 2011: 157). This personal practice theory builds the foundation for autonomous and agentic teachers, allowing for confidence with decision-making and with becoming 'agent[s] of social change' (Antikainen, 2010: 77) within classrooms and with students.

The normaalikoulu acts as a locus for research and cultivates a research culture within the teaching profession. Normal schools operate as a first port of call for professors, lecturers, teachers and student teachers to conduct research. In fact, parents of normaalikoulu students give informed consent every year for their children to participate in educational research (Chung, 2022). It is not unusual for normaalikoulu staff to be former lecturers of education at the affiliated university, or for university lecturers to be former normaalikoulu teachers, highlighting the strong research underpinnings of Finnish teacher education. Therefore, the normaalikoulu serves as a vehicle for instigating, analysing and synthesising current educational research and teaching practice (Chung, 2022). All of this fosters a culture of educational research in Finnish schools, supported by a master's level teaching workforce.

Teaching practice also takes place in so-called field schools, namely municipal schools that support teaching practice. Student teachers spend limited time in normaalikoulu, partly due to high numbers of student teachers needing practice (Ruuskanen, 2011). Therefore, additional practice takes place in field schools (Syrjäläinen and Jyrhämä, 2008, as cited in Krokfors et al., 2011). As Chung (2022) discusses at length, many student teachers find the normalikoulu 'not normal', and wish for more 'typical' teaching practices. Paradoxically, the constant supervision in a normaalikoulu setting does not allow for student teacher autonomy (Chung, 2022), either individually or as a community of student teachers (Paulsrud and Wermke, 2020). Therefore, field schools provide alternative teaching practice and supervision (Jyrhämä, 2006; Kansanen, 2008; Niemi, 2012), where student teachers feel more on par with the teaching staff, as well as more autonomous in terms of decision-making (Chung, 2022). Therefore, Finnish teacher education, while aiming to cultivate autonomous and agentic teachers, suffers from a paradox. Chung (2022: 111) discusses a 'second-order paradox of teacher education', where student teachers lack autonomy in their normaalikoulu practice, as they are constantly monitored by their mentor teachers. A professor of teacher education (cited in Chung, 2022: 111) describes the dilemma:

The main challenge is to promote professional autonomy of teachers within the teaching practicum ... It is a challenge we take seriously, how to educate the teachers so they can do their work on their professional ethics and professional expertise ... It is a dilemma which we call here a second order paradox of teacher education. It is a paradox. If you want somebody to become autonomous, then how [do you] supervise someone to be autonomous?

This raises the question: which technique best prepares teachers for emancipation in their future careers? Chung (2022: 92) cites one of the original professors of teacher education in Finland, who champions research and critical reflection to create future autonomous teachers:

Our research-based teacher education is based, or has two phases: the first is that it's evidencebased. Evidence-based means that it is based on research results, literature, scientific journals,

and so on, what colleagues have found in their research. You must know the subject if you are teaching ... so you must be on the point. What is the modern way of thinking in that area? But then the other face is that you are like a practitioner/researcher, reflecting on your own work so that you can evaluate what you do, and it's productive in that sense that you can search for new knowledge yourself in a classroom, and no one can help you.

Research-informed Finnish teacher education, which encourages critical reflection, therefore allows for self-reliant teachers, building their autonomy and agency as teacher-researchers.

Master's degree, research literacy and social transformation

The master's degree for all teachers supports an autonomous and, eventually, agentic educational ecosystem in Finland. While the academic and research orientation of Finnish teacher education took decades to consolidate (Chung, 2022), Niemi (2012) asserts that the raising of primary school teachers' education to the master's level is one of the most important educational decisions for the country. The Finnish 'ecosystem' (Kemmis and Heikkinen, 2012: 157), which includes its political structure, has allowed the master's degree for all teachers, including primary teachers, to come to fruition. The necessary coalition-building in politics, and the corresponding long-term vision for education policy, supports the high esteem for education in Finland (Chung, 2022). This in turn, along with the master's degree for all qualified teachers, facilitates teacher education to be seen as 'academically credible' (Furuhagen et al., 2019: 20) and autonomous. As stated previously, the Finnish ecosystem promotes teacher autonomy in terms of decision-making at the individual and collective levels (Paulsrud and Wermke, 2020), and at the classroom, school and professional levels (Salokangas et al., 2019), influenced by the Continental European input model and the Nordic welfare state. The aforementioned 'unique form of professionalism' (Erss and Kalmus, 2018: 97), or the Finnish positive hybrid of Anglo decentralisation and Continental non-surveillance, also cultivates a culture of autonomy for teachers. Furthermore, Biesta et al. (2015) similarly view teacher agency through an ecological lens. Teachers' transactions with the ecosystem, and their critical responses to challenging situations, shape and develop their agency. The master's degree emancipates teachers to make these decisions, and this coexists with a societal acceptance of teaching as a master's level profession in Finland. This article therefore argues that Finland's educational ecosystem supports both teacher autonomy and teacher agency.

Research-informed teacher education not only requires master's level critical thinking, but also emphasises the study and execution of empirical research. Therefore, 'deductive' Finnish teacher education, embedded in research, requires student teachers to read research, write essays and study research methods (Krokfors et al., 2011: 4). Chung (2022: 82) cites a teacher who states that 'I think we would be in deep trouble if we didn't have this long education', as teachers need to handle challenging subject matter, in addition to facilitating education 'as an agent of social change' (Antikainen, 2010: 77) in their classrooms. Furthermore, the research orientation of Finnish teacher education aims to develop the aforementioned pedagogical thinking. Therefore, theory embedded in empirical research and the study of research methods, learned through this 'long education' (Chung, 2022: 82), provides the foundation for a teacher's career, and cultivates the pedagogical thinking needed to inform decision-making, as well as justification of these decisions (Jyrhämä and Maaranen, 2012). The teacher-researcher, then, weighs up the empirical evidence to justify their own pedagogical decisions. This, in combination with the emphasis on critical reflection (Jyrhämä et al., 2008) in normaalikoulu practice, ultimately aims to prepare 'autonomous and reflective teachers' who become 'practitioner researchers' (Krokfors et al., 2011: 3). Therefore, this autonomy of decision-making aims for teacher agency and for fulfilling Finnish education's responsibility for social transformation (Antikainen, 2010).

The master's degree highlights the commitment to research-informed teacher education. Therefore, the research underpinnings of Finnish teacher education remain of utmost importance, including the emphasis on educational research methodology for 'critical scientific literacy' (Niemi, 2012: 32). Research literacy supports the decision-making of teacher-researchers, and therefore autonomy during their careers. For example, Finnish teacher education includes the study of national evaluation and assessment reports (Kumpulainen and Lankinen, 2012). This helps develop teachers' 'critical awareness and support[s] their abilities for independent and autonomous stance vis-à-vis external forces and mechanisms' (Ojanen and Lauriala, 2006: 75). Therefore, these exercises in research and critical

analysis, supported by a master's level, research-informed teacher education, allow teachers to become self-reliant in their careers, and to maintain their autonomy and independence with confidence.

Fully academic and research-informed teacher education took time to realise, despite the implementation of the master's degree in the 1970s (Chung, 2022). Currently, however, nearly all lecturers and professors in faculties of education have doctoral degrees (Maaranen et al., 2019), further cementing the unifying theme of teacher education: research (Jyrhämä et al., 2008). Internal evaluation of Finnish teacher education acknowledged 'that teachers are educational experts who show a research orientation in their daily work and who undertake research in their own working environment' (Säntti et al., 2018: 13). In other words, Finnish teacher education produces an ecosystem of research-literate, trusted and autonomous teachers, who draw on current educational research to inform decision-making concerning their teaching. The ecosystem (Biesta et al., 2015) promotes teacher agency as well.

This steadfast dedication to a research-based teacher education programme has its drawbacks, as increasing the research element requires sacrificing teaching practice. For example, teaching practice allocation was reduced by 30 per cent in order to increase theory (Säntti et al., 2018). The research of Chung (2022) shows that student teachers do wish for more practice, but that they do not necessarily wish for less theory. In fact, even student teachers show appreciation for their master's level education, for they view 'it as valuable that teachers have rather long academic studies instead of the more practical teacher training' (Jyrhämä et al., 2008: 11). In other words, Finnish teacher preparation had to make sacrifices to become a truly research-informed, master's level teacher education programme. Finnish teacher educators believe that this provides the problem-solving and critical reflection tools needed for autonomous teaching; the career serves as practice (Chung, 2022). However, does a master's degree necessarily provide the skills for teacher autonomy and agency, and for teacher quality, or did Finns achieve this through contextual influences? For example, previous research in the USA indicates that while there is a push for postgraduate degrees for teachers, there is no evidence that this improves teacher quality (Goldhaber and Brewer, 2000; Whitehurst, 2002), while some time ago, Kivinen and Rinne (1994: 523) cited Finland's former education minister, who stated that 'a university training offers no better guarantee of good teaching than that provided by the old seminaries or even the crash training programmes', implying an exaggerated glorification of academic Finnish teacher education and the aforementioned 'long education' (Chung, 2022: 82).

This article now argues that Finnish teacher education not only supports autonomy individually and collectively (Paulsrud and Wermke, 2020), but also autonomy from political control, which is supported by the study of educational science (Furuhagen et al., 2019). As mentioned earlier, the terminology of educational science in Finland imparts rigour to the study of education. Säntti et al. (2018: 17) elaborate:

Educational science, including teacher education, has long been recognized as a true academic discipline in Finland. In addition, it has been relatively free from political control, especially compared with other Western countries. This freedom has established the top priority of Finnish teacher education to produce high academic standards, and regulate the teacher's work accordingly.

Educational science, therefore, has achieved a very high level in Finland, and the emancipation of education from political control has allowed it to rise even further. Furthermore, the political structure of Finland, and coalition building to form a parliamentary majority, has facilitated political consensus about education in the country (Chung, 2022). The wider 'ecosystem' (Kemmis and Heikkinen, 2012: 157) of Finland therefore supports a master's level teaching profession with autonomous teachers acting as powerful 'agent[s] of social change' (Antikainen, 2010: 77). This emancipation and 'freedom', as discussed by Säntti et al. (2018: 17), further buoys the autonomy of Finnish teachers, and supports them in their path to teacher agency through the Finnish educational ecosystem (Biesta et al., 2015). This article thus discusses the education policy changes that support teacher autonomy and agency in Finland.

Decentralisation, autonomy and agency

Thus far, this article has discussed the features of Finnish teacher education that support decision-making autonomy at the classroom, school, professional (Salokangas et al., 2019), individual and collective (Paulsrud and Wermke, 2020) levels, and how this autonomy can lead to teacher agency, and

even to social transformation. The research-literate profession of teacher-researchers possesses the problem-solving skills to tackle, with confidence, the challenges that teaching presents through critical reflection. The research underpinning of Finnish teacher education was originally 'presented as more of an emancipated possibility' to teachers (Furuhagen et al., 2019: 17). The teacher education reforms and education reforms from the 1960s to the 1980s also supported this. The autonomy and agency of Finnish teachers is not only an outcome of teacher education, but also a carefully considered and cultivated result of the education system's decentralisation. Therefore, as argued previously, the wider Finnish ecosystem (Biesta et al., 2015; Kemmis and Heikkinen, 2012) supports the cultivation of teacher autonomy and teacher agency. Originally, the education system of Finland was under centralised control (Chung, 2009). However, restructuring in the 1960s established a new, local education administration, and further decentralisation occurred in the 1980s. For example, the national core curriculum was reformed in 1985 after the 1983 Basic Education Act, and it provided a vision of decentralisation and subsequent teacher autonomy (Vitikka et al., 2012). Antikainen (2010) suggests that this decentralisation in Finnish education was influenced by social democratic values. This 'refers to a general tendency towards equality, in which education is viewed as an agent of social change' (Antikainen, 2010: 77).

The decentralisation measures supported the values of equality, equity and democracy of Finland's welfare state, and these values instigated the idea of teachers as agents of social change. The corresponding teacher education reforms of the early 1970s also supported this. While the decentralisation of the education system increased school autonomy in Finland, this coincided with the academisation and increasing influence of research on Finnish teacher education. The core curriculum reforms in 1985 developed a vision of teacher autonomy and responsibility over the curriculum. Therefore, school decentralisation further cemented teacher autonomy and the role of education, and teachers as 'agent[s] of social change' (Antikainen, 2010: 77). According to the Continental and European tradition (Erss and Kalmus, 2018; Paulsrud and Wermke, 2020), Finnish schools are responsible for producing learning outcomes, and the government for providing for the schools in order to meet their goals. This has created a cycle of trust in the governance of Finnish education (Sahlberg, 2007), as well as in teachers, promoting a culture of autonomy in Finnish education.

This article further argues that the decentralisation of education in Finland supported the professionalising of teaching, as the educational reforms that decentralised decision-making for schools also aided teacher autonomy, agency and professionalisation. As suggested earlier, decentralisation of school governance occurred concurrently with the shift of teacher training to academic, research-underpinned teacher education (Chung, 2016). In addition, Finnish teachers' professionalism is embedded, among other things, in their autonomy and responsibility to society (Begrem et al., 1997), through their role as agents of change in Finland's ecosystem. Therefore, the notion of a core curriculum reflects 'a clear transition to decentralized educational decision-making, being much less prescriptive than the previous curricula' (Begrem et al., 1997: 437). Research-informed teacher education and a master's degree empower teachers to carry out the core curriculum as they see fit. Critical reflection and problem-solving skills support agentic teachers to become these agents of social change, and eventually to enact social transformation. Therefore, Finnish teacher education not only cultivates agentic and autonomous teachers, but also facilitates a culture of trust between Finnish society and the teaching profession. This trust among the Finns includes politicians and economists, which is rare in other countries (Simola, 2005). Chung (2009) discusses how a decentralised administration, a local implementation of education, and a virtuous cycle of learning are three major features of the Finnish education system. The decentralisation and devolution of school control solidified teacher autonomy and agency, highlighted by Finland's positive PISA outcomes.

Discussion and conclusion

Finland's commitment to research-informed teacher education led to professional emancipation, then ultimately allowed for classroom, school, professional (Salokangas et al., 2019), individual and collective (Paulsrud and Wermke, 2020) autonomy. The emphasis in Finnish teacher education on education science and research methods supports teachers' pedagogical thinking and critical reflection. In addition to education science, freedom from political control also facilitates teachers' emancipation (Säntti et al., 2018). The journey to this vision of teacher education was not always smooth (Chung, 2022), but it has produced an enviable outcome of autonomous and agentic, professional teachers. Paulsrud and Wermke (2020: 725) suggest that 'Finnish teachers' autonomy might already be regulated by their strong teaching profession, which makes them more certain in how to make the "correct" decisions individually'. The theoretical underpinnings of Finnish teacher education, as well as critically reflective normaalikoulu practice, facilitate this autonomy, in addition to the confidence that teachers develop through master's level study. Paulsrud and Wermke's (2020) assertions further support the argument for research-informed teacher education.

Besides the commitment to research-informed teacher education, the decentralisation of the 1980s and 1990s and the localisation of school curricula reinforced the decision to academise teacher education in Finland. These decentralisation measures further reinforced Finnish teacher autonomy and agency. Master's level education and normaalikoulu practice allow teachers to 'perceive themselves as ... individually autonomous' and the 'teachers' role might be more defined and regulated in advance by an extensive education with practice schools, which strengthens the uniformity of the profession and reduces the need for large-scale cooperation among colleagues in decision-making' (Paulsrud and Wermke, 2020: 718). In other words, as well as instilling autonomy, the teacher education reforms of the 1970s also consolidated and streamlined the profession, so much so that it increased efficiency. Similarly, Jyrhämä and Maaranen (2012: 110) state that 'teacher research gives teachers the knowledge and confidence to act as responsible professionals and that this is linked to autonomy in teaching'. The ambitious teacher education reforms of the 1970s, and the commitment to the bold vision of a research-literate and master's level profession, has led to an autonomous and agentic teaching profession. This is based in Finland's social democratic values, and the view that education, through teachers, acts as an 'agent of social change' (Antikainen, 2010: 77). Teacher agency also aims to create a 'more intelligent' education system (Priestley et al., 2015: 149), upholding the purpose of education of cultivating human excellence (Weniger, 1929, 1952, as cited in Tröhler, 2012) and agentic teachers' intention to shape society in a transformational manner (Matikainen et al., 2018).

The journey to research-informed, academic teacher education in Finland has led to several interesting, and significant, results. These include the well-documented outcome of the high status that teachers enjoy in Finnish society (Paulsrud and Wermke, 2020), highlighted by worldwide attention due to Finland's PISA scores (Chung, 2009, 2019; McKinsey, 2007). Some even argue that Finnish teachers' high level of autonomy contributed to the country's PISA results (Koski and Pollari, 2011). This article has illustrated how Finland's long, dedicated process of building research-informed teacher education has led to the successful cultivation of teacher autonomy and teacher agency. The Finnish 'ecosystem' (Kemmis and Heikkinen, 2012: 157) supports a Nordic/Continental European view of autonomy (Erss and Kalmus, 2018; Paulsrud and Wermke, 2020), buoyed by decentralisation measures (Vitikka et al., 2012). Furthermore, a uniquely Finnish 'form of professionalism' of 'empowerment, critical thinking, and autonomy' (Erss and Kalmus, 2018: 97) is supported by a Finnish positive hybrid of Anglo decentralisation and Continental non-surveillance. Research-informed teacher education underpins the Finnish social democratic view of education: an autonomous teacher acting as an 'agent of social change' (Antikainen, 2010: 77) who cultivates human excellence, revolutionising society (Weniger, 1929, 1952, as cited in Tröhler, 2012) through transformational teaching and learning (Matikainen et al., 2018).

Declarations and conflicts of interest

Research ethics statement

Not applicable to this article.

Consent for publication statement

Not applicable to this article.

Conflicts of interest statement

The author declares no conflicts of interest with this work. All efforts to sufficiently anonymise the author during peer review of this article have been made. The author declares no further conflicts with this article.

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