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# Finnish Lower Secondary Career Education Through a Systems Lens

COLLECTION:  
CAREER EDUCATION  
IN THE NORDIC  
COUNTRIES

RESEARCH

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## ABSTRACT

This article examines the Finnish lower secondary career education system as set out in national policy and curriculum documents. Grounded in a theoretical framework informed by prior phenomenographic research on lifelong guidance systems development, the study systematically explores the alignment of Finland's lower secondary career education system with established themes, including legislation, strategic leadership, cooperation, delivery, professionalisation and evidence of the impact. According to the results, the Finnish career education system for lower secondary schools is congruent with the systemic systems development category in the conceptual framework. The study demonstrates how systems thinking can provide nuanced insights into career education systems and functions.

## ABSTRAKTI

Tässä tutkimuksessa tarkastellaan perusopetuksen oppilaanohjauksen järjestämistä, sellaisena kuin se on kuvattu kansallisissa linjauksissa/kansallisissa poliittisissa asiakirjoissa ja opetussuunnitelmassa. Tutkimus nojaa teoreettiseen viitekehykseen, joka perustuu aiempaan elinikäisen ohjauksen järjestämistä koskevaan fenomenografiseen tutkimukseen sekä siinä tunnistettuihin keskeisiin teemoihin, kuten lainsäädäntö, strateginen johtaminen, yhteistyö, toteutus, ammattimaisuus sekä näyttö vaikuttavuudesta. Tulosten mukaan Suomessa oppilaanohjaus opetussuunnitelmien perusteissa ja sen käytännön toteutus vastaavat hyvin teoreettisen viitekehyksen mukaista systeemisen kehittämisen kategoriaa. Tutkimuksen mukaan systeeminen ajattelu voi rikastuttaa oppilaanohjauksen suunnittelua ja järjestämistä.

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The growing international interest in career education systems (e.g., Mann et al., 2020, 2021) reflects governments' recognition of the associated benefits for individuals, society, and the economy. Systematic career education improves access to career learning opportunities and impacts positively on students' career development and skills, including their capacity to navigate the education system and the labour market (Blenkinsop et al., 2006; Hughes & Gration, 2009), as well as the transition from school to decent work (e.g., Oomen & Plant, 2014; Mann et al., 2020; Ryan, 2001). Career education can foster motivation and positive attitudes to school learning (Hughes & Karp, 2004; Kashefpakdel et al., 2016; Sweet et al., 2014) and is potentially an effective means of promoting social equity (Archer & Tomei, 2014; OECD, 2003, 2004) and social mobility (Hutchinson, 2012; OECD, 2004). There is also evidence that early exposure to career education can contribute to the development of broader career expectations and aspirations, mitigating the impact of societal and familial pressures that may prematurely foreclose career choices (Welde et al., 2016). There is also a known correlation between immediate learning outcomes and longer-term social and economic outcomes (Hughes et al., 2016; OECD, 2010; Mann et al., 2021). Other studies indicate that students who gain some insights into the challenges of the labour market while still in education are likely to experience better psychological well-being when they begin to look for desirable employment opportunities (Koivisto et al., 2010; Mann et al., 2021).

As a systematic attempt to support pupils' career development through educational strategies (Niles & Harris-Bowlsby, 2021), career education has a long history (e.g., Gysbers, 2008; Hoyt, 1975, 2005; McCowan & McKenzie, 1997; Patton, 2019; Watts & Herr, 1976; Watts & Sultana, 2004). Many studies have argued that career education works best when integrated into the curriculum and that a 'whole school' approach to career education is most effective and beneficial for students' holistic development (e.g. Holman, 2014; Hooley et al., 2012; Lapan et al., 1997; OECD, 2004; Patton 2001; Patton & McMahan, 2014). Curriculum models can incorporate career education in one of three ways: as a separate subject, as an element of other subjects, or across the entire curriculum (e.g., Kettunen, 2023; OECD, 2004; Watts, 2001, 2011; Zelloth, 2009). The third model that crosses the entire curriculum requires careful coordination and strong school leadership and support. The literature also emphasises the value of collaboration within and across different sectors and the strengthening of ties between education and the world of work (e.g., Holman, 2014; Kettunen et al., 2020; OECD, 2004; Sultana, 2013, 2018). Ongoing evaluation, monitoring and review of the career education system is essential to ensure its quality and continuous improvement (e.g., McCowan & McKenzie, 1997; Niles & Harris-Bowlsby, 2021).

Many studies have also emphasised the importance of guidance counsellors' qualifications and competences, as career practitioners' training and competences ultimately play a pivotal role in the quality of career services (e.g., Cedefop, 2011; Hooley, 2014; OECD, 2010; Vuorinen et al., 2021). Some of those who provide career education and guidance in schools lack any specialised training (Cedefop, 2009; OECD & European Commission, 2004), and Barnes et al. (2020) noted an emerging desire in some countries to raise the status of the guidance profession. However, effective action is sometimes hindered by inadequate policy measures or service coordination, and as Ertelt and Kraatz (2011) emphasised, legislation is the most powerful instrument for professionalisation of this field. Efforts to improve systems, including career education systems, are necessarily long-term and evolve in response to surrounding political, economic, and social conditions (Coffman, 2007).

## CAREER EDUCATION SYSTEMS

Career education can be understood as a complex and interconnected system involving multiple interrelated components. In recent times, the term *system* has typically been used to describe an assemblage of organisations within a given policy field and the interconnections between them (as in 'health system' or 'education system') (Stewart & Ayres, 2001). *Systems thinking* can help to illuminate how such assemblages are structured and how they function by providing an overview of the system as a whole, viewing its separate components as elements of the system (Shaked & Schechter, 2017) that must work together if the whole is to function successfully (Arnold & Wade, 2015). While there are no perfect solutions, systems thinking facilitates the evaluation of options and impacts in the relevant context and supports

informed decision-making (Ndaruhutse et al., 2019). Systemic approaches for evaluating career education systems and services are uncommon, partly due to a lack of resources for the task's complexity and the inconsistent use of available evidence (Barnes et al., 2020; Kettunen et al., 2023; Sampson, 2015; Vuorinen & Kettunen, 2021, 2022). By applying systems thinking to career education, policy makers and career practitioners can develop sustainable solutions to longstanding problems that might otherwise seem intractable (e.g., Mann et al., 2020; OECD, 2018).

While the Nordic countries have a long tradition of providing career education and guidance in schools (e.g., Andreassen et al., 2019; Haug et al., 2020), national evaluations have revealed significant variations in such provisions in compulsory schools (Buland et al., 2011; EVA, 2022; SOU, 2019:4; Tryggvadóttir et al., 2014). The present article focuses on Finland but forms part of a wider project called NordicCareerEd (n.d.) and funded by the NordForsk investigating lower secondary career education systems and practices across the Nordic countries.

In Finland, the compulsory education applies nowadays to all 6–18-year-olds. This consists comprehensive school education at pre-primary, primary and lower secondary levels, followed by post-comprehensive education at upper secondary level, including both general and vocational training (Ministry of Education and Culture 2022; Välijärvi, 2021). On completing comprehensive school, each student must apply for post-comprehensive education. Compulsory education ends when the learner turns 18 or completes a general upper secondary or a vocational qualification (Ministry of Education and Culture, 2022).

The Finnish career education system has generally fared well in international comparisons (e.g., ELGPN, 2015; Holman, 2014; OECD, 2014; Sweet et al., 2014). For example, the results of optional PISA questionnaire indicated that levels of perceived competence and participation among 15-year-olds were the highest across the 22 responding countries (Sweet et al., 2014).

Based on the results of previous phenomenographic research on systems development in lifelong guidance, the present study addresses the following two research questions: 1) How is the Finnish lower secondary career education system represented in national policy and curriculum documents? 2) How does this representation align with the themes of expanding awareness identified in previous phenomenographic research on systems development in lifelong guidance? The overall aim of this research was to gain insights into the official stance of the Finnish career education system as set out in national policy and curriculum documents.

## METHOD

The present study builds on recent phenomenographic research by Kettunen et al. (2023), that explored career experts' conceptions of systems development in lifelong guidance (Table 1). Phenomenography (Åkerlind, 2005b; Marton, 1986; Marton & Booth, 1997) is a data-driven analytic approach that captures participants' varying experiences, understandings and/or conceptions of a target phenomenon at the collective level (Marton & Booth, 1997). As well as identifying the different understandings, a phenomenographic study seeks to identify the aspects that differentiate the categories from each other, hence revealing their qualitative differences. The primary outcome of phenomenographic analysis is a structured set of logically related categories that describe the qualitative differences in people's ways of experiencing or understanding the phenomenon in question (Marton, 1986; Kettunen & Tynjälä, 2018, 2022). These categories are typically organised as a nested hierarchy, ranging from least to most complex, and becoming increasingly advanced, powerful or sophisticated at higher levels of the hierarchy (Marton & Booth, 1997) The categories differ from each other by themes that run across the data. They are called 'themes of expanding awareness' because they not only reveal the aspects differentiating the categories but also the increasing complexity and width of the aspect when moving from the less advanced to more advanced category (Åkerlind, 2003, 2005a, 2018). The use of categories of description from previous investigations is both logical and methodologically appropriate (Collier-Reed, 2006), either as abstract instruments for future analyses or to assess their applicability in a specific concrete context (Marton, 1981).

Based on interviews with 30 career experts from 18 countries, Kettunen et al. (2023) identified four distinct categories of description (Table 1). The interviews formed part of a study commissioned by the European Commission DG Employment, Social Affairs and Inclusion

(for more detail, see Barnes et al., 2020). The results revealed qualitative variations in career experts' conceptions of systems development in lifelong guidance, ranging from minimal to systemic. As this structure is based on the conceptions of career experts, it can be considered relevant and applicable.

The categories differed along six themes that included: *legislation, strategic leadership, cooperation, delivery, professionalisation, and evidence of impact*. These themes of expanding awareness capture the structural relationships and differences between the categories; for example, the legislation was one theme that varied across the four identified categories (see Table 1), ranging from 'non-existent' (Category 1) to 'nominal' (Category 2), 'embedded in other policies' (Category 3), and 'explicit' (Category 4). (For more detailed results, see Kettunen et al., 2023.).

THEMES OF EXPANDING AWARENESS	CATEGORIES			
	MINIMAL	ASPIRATIONAL	STRATEGIC	SYSTEMIC
<b>legislation</b>	non-existent	nominal	embedded in other policies	explicit
<b>strategic leadership</b>	missing	scattered	devolved	shared
<b>cooperation</b>	lacking	emerging	multilateral	multisectoral
<b>delivery</b>	limited	fragmented	vertically coordinated	horizontally coordinated
<b>professionalisation</b>	resistant	aspirational	partial	regulated
<b>evidence of impact</b>	not evaluated	desired	ad hoc	systematic

**Table 1** Conceptions of systems development in lifelong guidance (reproduced from Kettunen et al., 2023).

Kettunen et al.'s (2023) empirical analysis provided an evidence-based conceptual framework (Table 1) for the analysis of lifelong guidance systems – in this case, career education systems and their perceived levels of development. The analysis examined pertinent national documents (including legislation and the core curriculum for the Finnish lower secondary career education system), in relation to categories in the framework. Documentary sources are widely used in educational research, not least because education systems tend to generate large volumes of documentary data (Punch & Oancea, 2014). The study did not explore existing practices or how the system is implemented in practise.

To begin, the researcher identified national documents related to the Finnish lower secondary career education system, based on the following inclusion criteria: 1) core documents in both legal and educational terms; 2) documents that were in force at the time of selection; and 3) relevance to the research question. The documents included: (a) *legislative texts* (e.g. Act on Compulsory Education 1214/2020; Basic Education Act 628/1998; Basic Education Decree 852/1998; Government Decree on the National Objectives for Education Referred to in the Basic Education Act and on the Distribution of Hours in Basic Education 422/2012; Student Welfare Act 1287/2013; Valtioneuvoston asetus opetustoimen henkilöstön kelpoisuusvaatimuksista 986/1998; (b) *policy documents* (e.g. KT Kunta- ja hyvinvointialueyönantajat, 2022; Ministry of Education and Culture, 2012; Valtiontalouden tarkastusvirasto, 2015; Valtioneuvosto 2020), and (c) the *national core curricula* (Finnish National Board of Education, 2016). The core curricula define the objectives and key content of different school subjects and describe how the main goals stipulated by legislation are to be implemented. The core curricula are prescriptive and must be implemented locally by municipal and private education providers (Halinen & Holappa, 2013). However, local education authorities, schools and teachers are granted broad autonomy in organizing education and implementing the core curriculum (OECD, 2020; Reinikka et al., 2018).

The six themes of expanding awareness in Kettunen et al.'s (2023) conceptual framework informed the thematic content analysis, which Leedy and Omrod (2001) describe as 'a detailed and systematic examination of the contents of a particular body of materials for the purpose of identifying patterns, themes or biases' (p. 155). According to Williams (2007), 'The method is designed to identify specific characteristics from the content' (p. 69). For that reason, the analysis was driven by the conceptual framework rather than the content. The documents were

examined through this lens, focusing on descriptions related to the six themes of expanding awareness. Each document was reviewed and assessed against the framework categories.

## FINDINGS

### LEGISLATION

The results suggest that career education in Finland is grounded in *explicit* legislation. As the primary law governing comprehensive schools, the Basic Education Act (628/1998) entitles every student to adequate guidance and counselling services throughout the school year (§ 30). Further, the Student Welfare Act (1287/2013) entitles students to a supportive and holistic school environment, ensuring their well-being is prioritized through a multi-professional welfare system that addresses their unique needs in collaboration with educational, health, and social services.

Among its other provisions, the Basic Education Act directs that the government shall determine the general national objectives of compulsory basic education and the allocation of lesson hours to different subjects, to subject groups, and to guidance counselling (§ 14). According to the Basic Education Decree (852/1998), basic education shall be organised as teaching delivered by class teachers, subject teaching shall be delivered by subject teachers, guidance counselling shall be provided by guidance counsellors, and special-needs teaching shall be provided by special-needs teachers. The teacher's duties include monitoring and promoting pupils' learning, work approach and well-being, ensuring that each pupil is treated respectfully and fairly, recognising early signs of potential problems, and providing guidance and support.

Guidance counsellors' annual working hours are defined in the teachers' collective agreement (KT Kunta- ja hyvinvointialueyönantajat, 2022) and differ from those of other teachers. According to the Government Decree on the National Objectives of Education referred to in the Basic Education Act and the Distribution of Hours in Basic Education (422/2012), two hours per week of basic education time are to be allocated to career guidance in grades 7–9. Each pupil is entitled to receive guidance counselling and adequate support for learning and school attendance as need arises (Act on the Amendment of the Basic Education Act 624/2010). While all staff members are involved, school counsellors have primary responsibility for the delivery of career education.

According to the Basic Education Act (628/1998, § 14), the Finnish National Agency for Education (operating under the Ministry of Education and Culture) determines the objectives and core content of different subjects and cross curricular themes, including career education. Within the framework of the National Core Curriculum, schools and local authorities must then formulate their own curriculum regulations (628/1998, § 14–15). Comprehensive school education providers have a duty to ensure that students in grades 8 and 9 of compulsory schooling receive individual guidance and counselling to prepare them for the next phase of their studies. Students who encounter challenges in terms of career planning, planning for further studies and/or entry to upper secondary level are entitled to more targeted and intensive guidance counselling (Act on the Amendment of the Basic Education Act 1216/2020). Once students have completed their comprehensive education, those providers remain responsible for guiding and supervising their compulsory education until they move on to the next phase of their education and begin their studies (Act on Compulsory Education 1214/2020). In sum, the analysis of the legal documents shows that the legislation concerning the lower secondary career education system is explicit as to central aspects of career education, such as provision, roles, and responsibilities that are focused on ensuring that students receive adequate guidance and support throughout their educational journey.

### STRATEGIC LEADERSHIP

Based on this analysis, strategic leadership in Finland's education sector (including career education) can be characterised as *shared*. The country's comprehensive school system has historically been governed by a combination of national and local authorities. The Finnish Ministry of Education and Culture prepares national strategies, legislation and plans. The Finnish National Agency for Education is responsible for national curricula, which specify key objectives, core content for school subjects and cross curricular themes, including career education. Within

the framework of the National Core Curriculum, schools and local authorities then formulate their own curricular regulations. The local curriculum complements and emphasises the goals, and the policies that direct the activities, the key contents and other aspects related to the organisation of education specified in the core curriculum from a local perspective. At the school level each school drafts its own curriculum founded on both the national and the local one. This means that teachers (including guidance counsellors) are also involved in refining the school-based curriculum, and the schools have a chance to refine the curriculum in relation to local circumstances.

The local mandatory strategic and operational plan for guidance and counselling describes the organisation of guidance counselling, including operating methods, and the division of labour and responsibilities, as well as work in cross-sectoral networks, cooperation between home and school in guidance counselling, cooperation with working life, and arrangements for the pupils' introduction to working life. The guidance plan is developed in cooperation with students, guardians and stakeholders, and achievement of declared objectives is assessed on a regular basis.

The present findings indicate that the Finnish education and career education system is characterised by shared strategic leadership at national and local levels. Reforms are accelerated by a range of supportive measures ensuring that processes are transparent and collaborative, promoting stakeholder commitments to joint goals, and generating an atmosphere of trust among national, local and school-level actors (Halinen & Holappa, 2013; Hargreaves et al., 2007). Education authorities and national policy makers trust that teachers, principals, and parents understand how to provide the best education for children and adolescents in their own district.

## COOPERATION

The analysis indicates that in lower secondary career education in Finland, cooperation is *multisectoral*, and involves networks that extend beyond the school. Local education providers are required to implement an institutional curriculum that incorporates cooperation with the local employers and the business community. The key elements of this approach include classroom visits by labour market representatives, workplace visits, project work, work experience placement (WEPs; in Finnish TET) and information about the different education and employment sectors (Kettunen et al., 2023). WEPs are implemented in conjunction with school subjects, building on their content and working methods (Finnish National Board of Education, 2016).

Every learner has the right to access support and counselling on any school day. This is a collaborative effort involving the learner, their parents and all their teachers, as well as learner welfare personnel when required. In accordance with the Basic Education Act (Amendment 477/2003), education providers must develop curriculum elements that address student welfare and home-school cooperation in collaboration with local social and health authorities. Promoting student well-being is the responsibility of everyone in the school community. All actors such as teachers, special education teachers, guidance counsellors, school nurses, school social workers and school psychologists participate in the multi-professional welfare work (Student Welfare Act 1287/2013). Together, these interdisciplinary and multisectoral teams play a pivotal role in safeguarding students' well-being and academic success.

## DELIVERY

The analysis indicates that career education delivery in Finland's lower secondary education system is firmly established and *horizontally coordinated*. The National Core Curriculum promotes a 'whole school' approach to career education, which means that career education and acquisition of career management skills as a learning objective is the shared responsibility of all staff members as a transversal theme across all subjects. The objective is to promote students' personal growth and development so that they can further develop their study skills and social skills as well as acquire knowledge and skills necessary in further life. While all staff members are responsible for career education as a compulsory element of the curriculum, the main responsibility lies with guidance counsellors (Finnish National Board of Education, 2016). In career education, pupils are not subject to summative evaluation, but a formative evaluation

of expected learning outcomes is required. Evaluation is based on student self-assessment and various guidance activities that include interactive, guiding, and motivating feedback (Finnish National Board of Education, 2016). Guidance counsellors must facilitate cooperation with parents/or guardians, employers, and other stakeholders, and are responsible for timetabled career education sessions, group activities, and individual guidance. Guidance counsellors must provide individual guidance and counselling to support pupils in developing the skills needed to make decisions on daily life, studies, further education, and their own future lives based on their readiness, their values, their situation, and their interests. Students learn to become aware of their own possibilities to have influence on the planning and decisions concerning their own lives, including educational choices and post-comprehensive school plans for education and training. Students are encouraged to reflect and challenge their own preconceptions about education and careers, and to make their choices without gender bias. (Finnish National Board of Education, 2016). To that end, guidance counsellors also arrange work experience modules and excursions to educational institutions and workplaces.

Guidance counsellors collaborate closely with subject teachers. The task of all teachers is to guide students in studies in the subjects they teach and to help them to develop social skills, learning-to-learn skills and capabilities as well as acquire knowledge and skills necessary in further life. All subjects must include modules that link subject knowledge and skills to the demands and possibilities of working life. Within the career education students will strengthen their personal agency and ability to take initiatives in decisions related to concerning their own lives. Beyond choices related to the next level of study, there is an emphasis on promoting the acquisition of lifelong career management skills as a transversal learning objective and competence. (Finnish National Board of Education, 2016). The present findings highlight the coordinated collective approach, outlined in the National Core Curriculum.

## PROFESSIONALISATION

The analysis reveals that guidance counsellors' qualifications and competences are closely *regulated* in Finland; specifically, the Decree on Qualification Requirements for Teaching Staff (986/1998) requires a master's degree in school counselling or a 60 ECTS (European Credit Transfer and Accumulation System) postgraduate diploma. In addition to this specialised training, all guidance counsellors must possess qualifications equivalent to those of teacher. Teacher education programs foster a research-based professional model. Training for research-based professionalism has generally aligned well with new policy developments related to school-based curricula and local decision making. (Westbury et al., 2005).

The Finnish education system also places strong emphasis on continuous professional development and guidance counsellors are expected and encouraged to engage in ongoing training and learning to keep up with the latest research, counselling strategies and education policies. The National Competency Framework for Career Professionals (Kettunen et al., 2024; Vuorinen, et al., 2024) enables guidance counsellors to assess their strengths and development needs. By referring to career professionals' knowledges and understandings defined in the framework, guidance counsellors can identify their own development needs and goals (Kettunen et al. 2023). According to their work contract, relevant statutes and collective agreements, guidance practitioners are obliged to attend continuous professional development events for one to five days each year. In general, career education and guidance services in Finland are provided and coordinated by full-time guidance counsellors who are employed by the school and must hold legally defined qualifications.

## EVIDENCE OF IMPACT

The analysis indicates that evidence of the impact of lower secondary career education system in Finland is conducted through a *systematic* approach by education providers and schools through self-assessment and quality monitoring. The Finnish National Agency for Education oversees national assessments of learning outcomes to determine the extent to which national core curriculum objectives have been met. Education providers have a statutory duty to evaluate the education they provide and its impact, as well as participate in in sample-based national external evaluations (Basic Education Act 628/1998). Rather than monitoring



and controlling, evaluation measures focus on developing and supporting schools (Väljärvi, 2013). Self-evaluation of schools and education provider consists of collecting information on how the aims of education based on the Basic Education Act (628/1998) have been achieved. Self-evaluation practices are determined at the local level, and education providers and schools can draw on the results of national evaluations, development projects, and the National Quality Criteria (Ministry of Education and Culture, 2012). Although not mandatory, the Quality Criteria for Basic Education (Ministry of Education and Culture, 2012) are widely used by schools and municipalities (European Commission, 2015). In sum, although relying on provider self-assessment and quality monitoring, evidence of impact can be seen to be collected systematically.

## DISCUSSION

The present study examined Finnish lower secondary career education through a systems lens. Referring to Kettunen et al.'s (2023) conceptual framework for lifelong guidance systems development, the study investigated how the framework aligns with relevant national documents.

The results reveal that Finnish lower secondary career education aligns closely with *systemic* development (Category 4). The findings also show that the system is grounded in *explicit* legislation and that strategic leadership is *shared* at both national and local levels. Cooperation is *multisectoral* and involves networks that extend beyond the school. This approach aligns with earlier research highlighting the value of collaboration within and across sectors and the strengthening of ties between education and world of work (e.g., Holman, 2014; OECD, 2004; Sultana, 2018). Career education delivery appears to be firmly established and *horizontally coordinated*, and corroborating previous evidence that it works best when integrated into the curriculum and that the 'whole school' approach is most effective and beneficial for students' holistic development (e.g. Holman, 2014; Hooley et al., 2012, Lapan et. al., 1997; OECD, 2004; Patton 2001; Patton & McMahon, 2014).

Guidance counsellors' qualifications and competences proved to be closely *regulated* aligning with existing evidence that legislation is the most powerful instrument for professionalisation (e.g. Ertelt & Kraatz, 2011). Although relying on provider self-assessment and quality monitoring, evidence of impact can be seen to be collected *systematically*. This aligns with previous findings indicating that ongoing evaluation, monitoring, and review are essential to ensuring the quality and continuous improvement of the career education system (e.g., McCowan & McKenzie, 1997; Niles & Harris-Bowlsbey, 2021). The generally strong performance of Finnish career education in international comparisons (e.g., ELGPN, 2015; Holman, 2014; OECD, 2014; Sweet et al., 2014), may owe in part to this systemic approach.

It is important to note that the present analysis did not examine how consistently and effectively the current Finnish career education system works in practice or how it is implemented in practice, and further research is needed to evaluate the practical realities as experienced by students, guidance counsellors, municipalities, and schools. For example, an earlier report on the state of guidance and counselling (Numminen et al., 2002) noted a lack of any comprehensive or systematic information about differences across municipalities or schools. Based on the recommendations outlined in the national cross-ministerial Lifelong Guidance Strategy 2020–23 (Valtioneuvosto, 2020), recent thematic evaluations at national level have centred on the organisation of guidance services, and student access to these during key transitional phases, and on the structure of career professionals' initial training. To build on these efforts, comprehensive data should be collected from multiple sources, including feedback from students, guidance counsellors, educators, and administrators at municipal and school levels. Robust empirical data of this kind would enable policymakers and practitioners to develop a more nuanced understanding of the career education system strengths and weaknesses. Evidence-based improvement would ensure that the career education system meets its intended goals and responds effectively to the evolving needs of Finnish society.

The present study confirms the value of systems thinking as a useful means for demonstrating how systems, such as career education system, are structured and how they operate (e.g. Arnold & Wade, 2015; Collin, 1990; Shaked & Schechter, 2017). This research also demonstrates how a conceptual framework grounded in empirical data (Kettunen et al., 2023) can be used to assess the development of lifelong guidance systems, both nationally and internationally. The hierarchical structure of the themes and categories can help policymakers and other stakeholders to deepen their understanding of critical factors that may play an important role in the development of a lifelong guidance system, including career education systems. In addition, the presented framework provides a robust foundation for future empirical research, and the systematic exploration of how systems align with established categories. This approach enhances rigour and depth by ensuring that findings are grounded in a coherent and comprehensive analytical framework contributing to further advances in career education, guidance, and counselling.


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## COMPETING INTERESTS

Author has been an editorial board member of NJTCG journal since 2020. The author has no other conflict of interests to note.

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