



Developing Teachers' Collaborative Expertise in School Well-being

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Abstract

This participatory action research aimed to understand teachers' experiences and the development process of collaborative expertise in a school well-being program implemented in Finnish comprehensive schools. Teachers from two schools participated in a school well-being program for one and a half school years. During the program, they reflected on their workplace practices, processes and actions for promoting school well-being during the program. The research included focus group interviews at the beginning and end of the program. The thematic analysis revealed that key elements for collaborative expertise are courage to accept uncertainty, understanding school culture as a constant and complex development process, and educational leadership. These elements enable a reflective, broad-minded and resilient school culture, which is essential for developing teachers' collaborative expertise in school well-being. In conclusion, teacher educators, educational researchers and education policymakers are called on to reorganise initial teacher training, the induction phase of teachers and in-service training from the perspectives of expertise and organisational studies. Additional process-oriented, continuous development and novel methods and practices are also needed to enhance well-being in the whole school community.

Keywords: Collaborative expertise, school well-being, school culture, participatory action research, teacher education

Introduction

School well-being is currently a phenomenon of interest to researchers because it plays a significant role in students' learning outcomes (Thorburn, 2015) and has implications for their future lives (Vangrieken, Dochy, Raes & Kyndt, 2015). However, most school programs aimed at well-being are focused only on students, and effective programs require teachers to genuinely commit to changing school cultures; such changes have, and in most cases, not been achieved (Ahtola, Haataja, Karna, Poskiparta & Salmivalli, 2012; Burke, 2020; Ronen & Kerret, 2020). Furthermore, the outcomes of school-level well-being programs are often dependent on case-specific issues and are culturally and contextually bound to the schools under investigation (Jäppinen, Leclerc & Tubin, 2016; Pyhältö, Pietarinen & Soini, 2012). However, school well-being and well-being are complex and multidimensional concepts that lack a consistent definition (Kiefer, 2008; La Placa, McNaught, & Knight, 2013; Svane, Evans, & Carter, 2019). For example, a teacher's occupational well-being can be broadly defined as the absence of negative experiences, such as stress and burnout, and the presence of positive experiences, such as job satisfaction (Baldschun, 2015); while school well-being has been defined as a psychologically, socially, physically and economically safe school community and environment for all actors in school community (Finnish National Agency for Education, 2024; Konu & Rimpelä, 2002).

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Previous studies have shown that teachers' occupational well-being has been important for the well-being of the school community as a whole, and in particular for the quality of teaching, students' learning outcomes and engagement in school (Spilt, Koomen, & Thijs, 2011). However, there is limited amount of studies on how teachers collaborate and collaboratively commit themselves as learners in their workplaces (Billett & Choy, 2013; Hakkarainen, Palola, Paavola & Lehtinen, 2004; Tynjälä, 2008; Vangrieken et al., 2015; Weick, Sutcliffe, & Obstfeld, 2005; Wenger, 1999) while at the same time acting as experts in school well-being (Burke, 2020; Owen, 2016; Thorburn, 2015). In addition, the existing literature does not adequately address the community-based learning process by which teachers commit themselves as experts in school well-being, especially from a holistic perspective. The connection between well-being and school culture thus presents a need to create a shared understanding of the opportunities and challenges involved in developing teachers' collaborative expertise in school well-being.

Because more research is needed to understand how teachers can become more committed to developing their collaborative expertise from a holistic perspective and meaningfully engage in promoting well-being and enhancing school culture towards it, this study was executed. In addition, more studies are needed on the role of teachers as pedagogical leaders and change agents in renewing school cultures towards enhanced well-being (Fullan, 2016; Male & Palaiologou, 2017; Ronen & Kerret, 2020). The goal-oriented development of a school culture requires teachers' participation and consultation, even from conflicting perspectives, to create a shared understanding and evolve new goals in school culture towards school well-being (Svane et al., 2019). Participatory action research enables the community to reflect upon their experience and theoretical and practical knowledge and develop new practices together (Kemmis, 2006).

Consequently, the current participatory action research explores the development of teachers' collaborative expertise at two Finnish comprehensive schools from the teachers' perspective. The study considers workplace learning practices, processes and actions for developing collaborative expertise in developing school well-being programs for the school community. To fully understand how teachers develop their collaborative expertise in school well-being, it is necessary to clarify what is meant by *expertise* and *collaborative expertise* and how these concepts guide our analysis.

Theoretical Framework: Towards Collaborative Expertise

An expert is someone who can consistently exhibit superior performance in representative tasks within a domain (Ericsson, 2006). They can also continue this exceptionally high level of performance (Ericsson, 2015) and actively maintain and develop their specific skills and competencies through deliberate practice, which is the core of regenerating expertise (Krampe & Charness, 2018). Expertise can be presented as an essentially progressive phenomenon where, once a certain level of routine performance has been attained, the expert constantly tries to surpass the boundaries of their knowledge, skills and competence (Bereiter & Scardamalia, 1993). Developing expertise is based on both present learning and experiences but also critical reflection on previous knowledge (Engeström, 2018; Novak & Gowin, 1984; Novak 2002).

The concept of expertise is based on (1) formal or theoretical knowledge, including factual and conceptual knowledge; (2) practical or empirical knowledge, including procedural knowledge and tacit knowledge or proficiency, as well as reflective knowledge and skills; and (3) metacognitive and self-regulatory knowledge (Bereiter & Scardamalia, 1993; Bereiter, 2002; Eraut, 2004) combined with (4) sociocultural knowledge creation (Hanhimäki & Risku, 2021; Tynjälä, 2008). The different components of expertise can be separated from each other analytically but are closely integrated at high levels of practice (Tynjälä, 2008.). Tynjälä and Gijbels (2012) integrated these components as a model of Integrative pedagogy which can be used as a theoretical tool for planning and implementing learning processes.

Recent expert studies emphasize collaboration (Engeström, 2018; Ericsson, 2015; Langlois, 2020; Lee, Lemanski, Van Deventer & O'Brien, 2021; Tynjälä, Virtanen, Klemola, Kostinen & Rasku-Puttonen, 2016). Collaborative expertise necessitates practices related to sharing and creating mutual understanding (Novak, 2002; Novak & Gowin, 1984; Tynjälä, 2022; Tynjälä, Nuutinen, Eteläpelto, Kirjonen & Remes, 1997). Collaborative expertise evolves in a collective, goal-oriented, shared and synergetic process (Jäppinen & Taajamo, 2022), which includes aspects of expertise in a phenomenon. The concept of collaborative expertise, according to Hakkarainen et al. (2004), can be understood as the competencies, skills and expertise in teamwork that characterise dynamically changing work environments and the transitions from work to education and back again. Furthermore, expertise can be studied as a collective and networked field of action (Hakkarainen et al., 2004). Developing collaborative expertise also requires participation in an ongoing social activity and questioning existing practices as well as modelling and testing new practices (Engeström, 2018; Wenger, 1999).

Collaborative expertise can be viewed as the product of collective learning that occurs when participants jointly make sense of a phenomenon, for example through narratives, and is thus dependent on and shaped by the quality of social interaction within the group (Gioia & Chittipeddi, 1991; Weick, 1995, 2012; Weick et al., 2005). Enhancing collaboration and the sharing of expertise within large, complex organisations requires a multi-layered developmental process and a diversity of approaches (Heimstädt, Koljonen, & Elmholdt, 2024; Lee et al., 2021; Tynjälä, 2022). The development should be an ongoing process and based on a shared understanding of the issues at hand and the complexity surrounding them (Weick et al., 2005). It also requires consideration of how to support teachers in learning collaboratively at work and from work. In the context of the present study, expertise forms through collaboration among teachers who are engaging in work but are at the same time learning from this work. In this research, collaborative expertise is understood based on individual experience, knowledge, action and reflection, which evolve into a collective phenomenon through the teachers' empowering development process (e.g. Jäppinen & Taajamo, 2022). In other words, the theoretical base of collaborative expertise in planning and implementing the school well-being program leans on the principles of Integrative pedagogy.

The aim of the study

Previous studies have studied school well-being from various perspectives. However, there is still lack of knowledge on how teachers in their workplaces collaborate and collaboratively commit themselves as learners and change agents in developing school well-being. The current study explored the development of teachers' collaborative expertise in school well-being during the program designed for that. It was done by reflecting on workplace learning practices, processes and actions for promoting school well-being. Although the study refers to teachers' agency in renewing school culture, it does not attempt to explain change during the process. Instead, the purpose was to find issues essential for implementing a successful school well-being program based on teachers' collaborative expertise in school well-being. The specific research questions (RQs) were as follows:

(RQ1): What do teachers experience as meaningful in developing their collaborative expertise in school well-being?

(RQ2): What are key elements in a program designed to support the development of teachers' collaborative expertise in school well-being?

Research design

Context and participants

In Finland, compulsory formal education consists of nine years of comprehensive school and starts at age seven, which is later than in many other countries. High professional competence (i.e., master's degree from the university) and student-centered practices in which students are active learners are

important. The Finnish public school system provides all children, including those from different social backgrounds, equal opportunities for education. The national core curriculum for comprehensive schools emphasises both students' learning and well-being. Well-being has a broad meaning in the national core curriculum, encompassing physical, mental, social, as well as economic aspects (Finnish National Agency for Education, 2024).

The participating teachers were class teachers teaching grades 1 to 6 and subject teachers teaching grades 7 to 9 in Finnish comprehensive schools. Teachers ($n = 34$) from two Finnish comprehensive schools participated in the school well-being program: nine class teachers, 17 subject teachers, four special education teachers and two head teachers. 23 were female, and 11 were male. The particular schools were chosen on a voluntary basis, showing interest and commitment to focus on school well-being issues. All teachers had master's degrees, and their work experience varied from early in the career to those at the threshold of retirement age. They all participated in the school well-being program on a voluntary basis.

Design of the program and data collection

The main point of the school well-being program was to promote the teachers' own well-being by strengthening their expertise at work, and to study the development of their expertise. Another important point was the promotion of the well-being of students and the rest of the school community. The school well-being program was at the same time the base for the participatory action research and it had four steps described in Figure 1: 1) planning, 2) first round of focus group interviews in both schools, 3) ten joint coaching meetings, which can be described as in-service education sessions (hereafter 'meetings') of teachers with the researcher and a trainer and including one with parents' meeting, and 4) a second round of focus group interviews at the end of the program. Focus group interviews were chosen as a data collection method because, at their best, they can stimulate and enlarge the discussion and reflection through new perspectives. The focus group interview data used in the current study was collected at the beginning and at the end of the program.

The data consists of transcribed focus group interviews gathered during the second and fourth step (see Figure 1, Step 2 & 4). The data used here is a part of the extensive research material gathered during 2009-2010 pilot program in Finland for enhancing school well-being (Ukskoski, 2013; Ukskoski, Kostiainen, & Rautiainen, 2025). Focus group interviews were conducted at the beginning of the intervention, that is, before meetings started, and at the end of the intervention when meetings were finished. The researcher was responsible for the data collection of the focus group, but the trainer took part in the focus group interviews at the beginning to be present for the participants' questions as well as thoughts and expectations for the training. The focus group interviews at the end of program were conducted by the researcher alone for ethical reasons, such as keeping the answers anonymous.

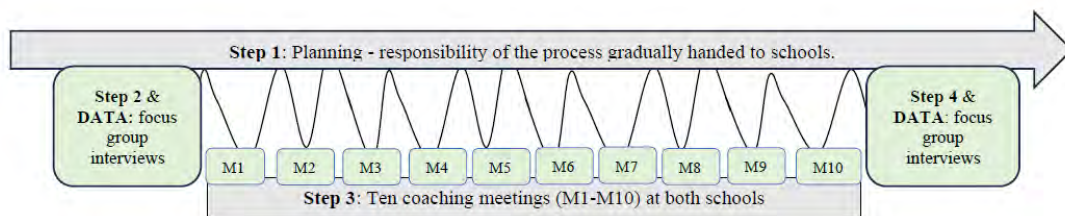


Figure 1. The school well-being program and data collection

The planning step in both schools was carried out during a school year, and the other study steps were implemented over one year in the primary school (grades 1–6, ages 7-13 years) and one and a half school years in the lower secondary school (grades 7, ages 13–14 years). The researcher and the trainer were from outside the school organisations and realised the program, which became concrete to the

teachers as meetings. In addition, while collecting data, the researcher's role was to participate with the participants, based on the principles of participatory action research. The researcher also attempted to promote transparency in the research by compiling a memo of each meeting for the participants. The memo was not only a document for the participants but also a tool for the trainer and the researcher to plan future meetings. During the school well-being program, in addition to the focus group interviews, the researcher gathered information about the participants and the school community (linked to the pilot program) and all data were handled ethically and anonymously. Initially, participants were a little apprehensive about the presence of the researcher and trainer from outside the school, but as the school well-being program progressed, participants were encouraged to reflect more openly and deeply on their own work practices and expertise with the researcher.

Building on the initial planning phase, each school formed a steering group of two to four teachers. The steering group aimed to secure the smooth running of the school well-being program and ensure that developing collaborative expertise in school well-being among teachers would continue after the researcher and trainer left the school. At the beginning of the program, the researcher, together with the trainer, guided the process quite strongly through continuous evaluation based on iterative principles of action research. However, as the research advanced, responsibility for the process was gradually handed to the steering group and the participants.

During the second step, after forming a steering group and starting planning, the researcher implemented the thematic focus group interviews before the meetings. The interviews aimed to involve participants and document their attitudes, thoughts, aims and concerns about school well-being and practices, actions and processes they implemented in their school culture. Another aspect that permeated each interview was the presence or absence of collaboration and a common understanding of school well-being.

In the third step, the researcher and the trainer conducted 10 meetings with teachers and other staff at both schools. The meetings included theoretical knowledge of developing collaborative expertise of school well-being and participants' experiences of their practices promoting school well-being. The pre-planned main themes of the school well-being program meetings were (1) commitment of the whole school organisation, including its leadership and stakeholders, (2) ethical issues of school well-being, (3) trust among members of the school community, (4) goal orientation, (5) community relationships, (6) the appreciation of individuals, (7) activities of the parent-teacher association, (8) informal social norms, (9) cultural differences and (10) moments of ease and relaxation. According to the principles of the Integrative pedagogy, participants had the opportunity to suggest more precise discussions about issues they found meaningful in their school. Participants also sometimes had ideas for working methods which they found productive. Hence, it is important to note that the meetings followed a bottom-up process where participants, together with the researcher, constructed the content of the meetings and, therefore, participated in guiding and evaluating the content of the entire collaborative expertise development process to make it suitable for their school. Participants reflected on and developed their practices and expertise both individually and collaboratively during the program. During the meetings, participants also discussed how to manifest school well-being in everyday school life.

Each of the ten meetings lasted from one to three hours in primary school and from two to four hours in lower secondary school. The meetings' timing and duration depended on the schools' timetables and normal routines. Hence, the role of the head teachers was important as they could arrange enough time and other resources for the sessions and for the steering group meetings during the day. Throughout the collaborative expertise development process, the researcher evaluated the impact and results of the meetings. After each meeting, participants were encouraged to implement their new knowledge and skills so that they could inform in the next meeting what methods and means they found useful in their own work and thus enable others to benefit from their learning. Parents participated in the program in

parent meetings guided by the teachers, the researcher and the trainer. Parents were also part of the program through home-school cooperation in teachers' discussions but not as part of data collection.

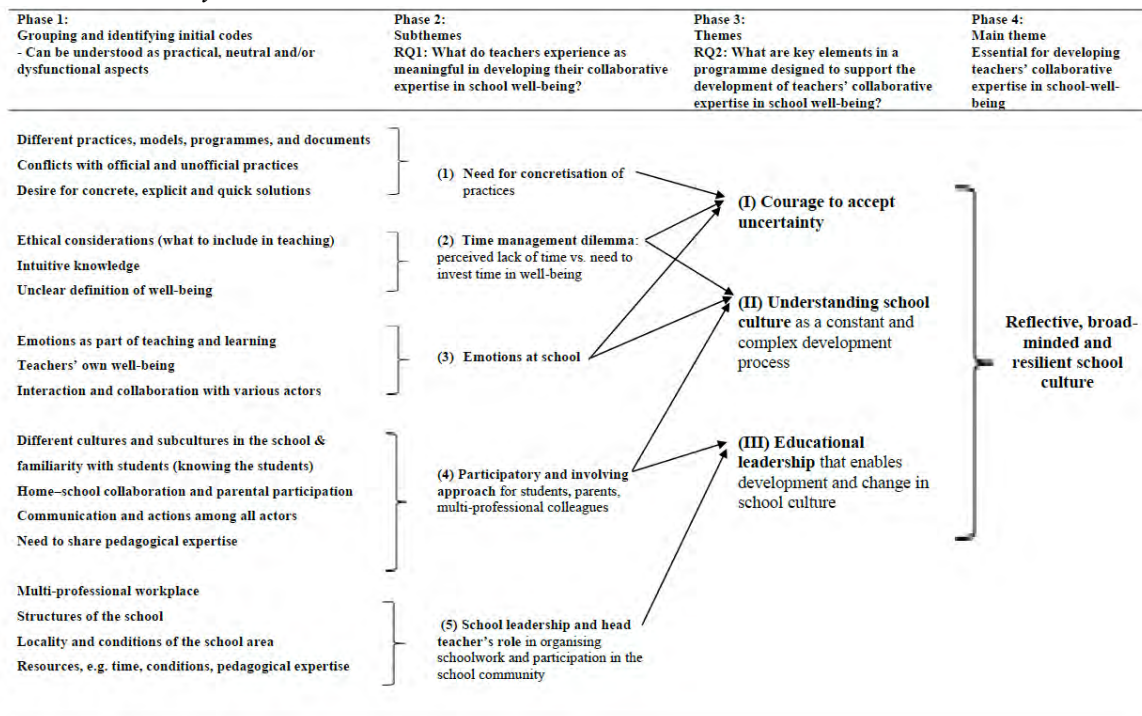
After all meetings followed the fourth step which was the final thematic focus group interviews. Altogether, seven focus group interviews were recorded: four in the second step and three in the fourth step of the research. At the beginning of a focus group interview, the main question was: What are your hopes or expectations for this process a) from the perspective of your own work, and b) from the perspective of the community as a whole? Both the researcher and trainer were present in this interview.

At the end of a focus group interview, the main questions were: What has happened in this process a) from the perspective of own work, and b) from the perspective of the community as a whole? What aspects of the process you found important? The focus group interviews consisted of four to seven participants, including teachers, and lasted from one hour and fifteen minutes to two hours (in total, nine hours and seven minutes of recordings). These interviews were transcribed before analysis.

Thematic analysis

The analysis of the focus group interview data was conducted using thematic analysis (Braun & Clark, 2006; Vaismoradi & Snelgrove, 2019). Given this study's qualitative, exploratory nature and the richness of focus group interview data, thematic analysis was deemed an appropriate method to identify and interpret patterns of meaning related to the development of collaborative expertise in school well-being. The analysis process is presented more closely in Table 1.

Table 1.
Thematic Analysis Process



The unit of analysis was a sentence which could consist of a conversation between several people, and ranged from some words to sentences. Teachers expressed their opinions on what they felt was relevant, as well as on the forms of functional, neutral or non-functional matters related to school well-being.

First, we grouped initial codes from the transcribed data related to teachers' practices, reflections and understandings concerning the promotion of school well-being. We identified 17 initial codes:

Different practices, models, programmes and documents, Conflicts with official and unofficial practices, Desire for concrete, explicit and quick solutions, Ethical considerations (what to include in teaching), Intuitive knowledge, Unclear definition of school well-being, Emotions as part of teaching and learning, Interaction and collaboration with various actors, Teachers' own well-being, Different cultures and subcultures in the school and familiarity with students (knowing the students), Home-school collaboration and parents' participation, Communication and actions among all actors, Need for sharing pedagogical expertise, Multi-professional workplace, Structures of the school, Resources (e.g. time, conditions, pedagogical expertise) and Locality and conditions of the school area.

Second, we defined codes for five categories. For each theme, quotes in the teachers' own voices are provided. Third, after re-reading the transcribed text, coding and categories, we reviewed, defined and named themes. Finally, we outlined a broader main theme of the whole study, in other words, what is essential for developing teachers' collaborative expertise in school well-being. It combines all sub-themes and covers previous steps in the analysis process

Findings

Meaningful parts in teachers' collaborative expertise

To answer the first research question, we identified five categories from the codes describing what teachers experience as meaningful in developing their collaborative expertise in school well-being: (1) Need for concretisation of practices, (2) Time management dilemma: perceived lack of time vs. need to invest time in well-being, (3) Emotions at the school (4) Participatory and involving approach for students, parents and multi-professional colleagues and (5) School leadership and the head teacher's role in organising schoolwork and participation in the school community. These categories are presented in more detail below.

Need for concretisation of practices

The schools had many different practices, models, programs and documents for promoting school well-being, but these were not shared by the whole school community. Despite these practices, programs and documents, the teachers thought they did not share enough expertise and experiences. Practices varied between teachers, and some practices that were meant to be officially implemented throughout the school were not implemented or implemented only partly. Thus, there were conflicts between official and unofficial practices. Nevertheless, regardless of already workable models and programs, the teachers still desired concrete, explicit and quick solutions for developing collaborative expertise in school well-being. As one teacher said:

H18: *so, in a way, [about] the preventive things, so like as I haven't perhaps had much [experience] putting out fires so that you'd sort of have a clear thing in mind – that there'd be a kind of tool that could be easily slipped into the work that could help produce great results.*

Time management dilemma

Time management dilemma perceived lack of time vs. need to invest time in well-being. The teachers felt they had insufficient time to contribute to promoting or minimising harm to students' well-being and posed numerous ethical questions regarding what should be the focus of their profession. They were conflicted over how to divide their time between teaching and pastoral care. However, during the meetings, many teachers solved this time management dilemma by realising that by investing more time in discussing different aspects of well-being and resolving students' conflicts, a more peaceful and relaxed atmosphere in class could be created, resulting in better learning outcomes.

During the research, the teachers expressed a great deal of intuitive knowledge, but, in many cases, they did not have enough courage to use it. One reason for this was an unclear definition or no definition at all of well-being. Further reasons were related to the structures and resources of the school, as well as

leadership issues. Time was considered a key resource, and lack of time was the main reason why teachers were unable to develop collaborative expertise in school well-being. Nevertheless, during the research, the teachers came to realise that, if school well-being is considered important enough in the school community, they and their head teacher could be available for it. Time was thus considered an obstacle, yet also part of the solution, like two teachers noted:

H29: *Well, it's pretty clear that subject teachers just focus entirely on their teaching because there's so much content in some [subjects] and then they try to push to meet some curriculum [requirements] so there's just unfortunately no time left.* H34BS: *But then you [just] think like if no one's able to concentrate and you just keep churning out what you've got to teach, so like isn't that just a waste of time, too.*

Emotions

Emotions at school concerned teaching, thinking and working but also interaction and collaboration with various actors in the whole school community. The teachers felt that they needed good interpersonal skills in their work, as they almost continually work in interaction and collaboration with colleagues, students or students' parents and with multi-professional personnel. This all caused an emotional load including uncertainty, anger or feelings of inadequacy. Sharing thoughts and reflections about one's work was sometimes felt as a fearsome experience, especially among unfamiliar colleagues or as a newcomer teacher. Also, acquiring theoretical knowledge was sometimes felt to be frustrating or exhausting. In addition, teachers experienced emotional stress due to their desire for concrete and quick solutions and practices. Overall, teachers' emotions were identified as an essential aspect of teaching and learning. In addition, discussions with each other and the possibility of sharing emotions, experiences and practices in work and from work were experienced as especially important and as advancing the teachers' own well-being. These two teachers expressed their emotions like this:

H33: *Because you're really only just barely starting out as a teacher in the field like here on the school side, like it feels like you just don't have the skills yet, you don't know how to react to the situation.*

H24: *it's really difficult to like make the changes visible, because they're inside all of us, they're such small, fine adjustments, but if I've ever had an idea, it's never gonna get out of there.*

Participatory approach and involving

The aim of the participatory approach was to involve participants in promoting well-being collaboratively. According to the results, enhancing school well-being demands both understanding students' different cultures and subcultures in the school and familiarity with students. Students have their own cultures and ways of acting, and teachers can have difficulty recognising, for example, the line between humour and bullying and understanding students' norms and values. As a result, teachers sometimes felt it hard to understand students' behaviour. In preventing school bullying, teachers recognised social pressure among students and fear of standing out from peers. Therefore, understanding students' different personalities was considered especially important. The teachers recognised the existence of various subcultures in their workplaces. Parents and families also had their own cultures and ways of reacting and being involved in schoolwork. The teachers understood the importance of their role in leading home-school collaboration and parental participation, but they also felt this to be exhausting and difficult due to the above-mentioned issues. Home-school collaboration was experienced to be challenging in many ways but also to be, in many cases, well-functioning. The collaboration was felt to be essential for students with special needs or those in transition phases in their school attendance, as well as for supporting communication and actions involving all actors in the school community. The teachers emphasized the need to share expertise because their work had become networked and multi-professional, but they were still isolated. In addition, as there is no single right or

wrong way to solve problems, the teachers felt a great need to share pedagogical and other professional expertise in the complex situations that they often address, such as in enhancing school well-being. As one teacher talked about sharing pedagogical expertise and participation:

H31: *The point was in advance that it would always be something concrete to put into it, but I guess it was [H28] only who tried it with his own small class, that it was more of such a pedagogical discussion and... as we considered this phenomenon and this ethics and it was a bit like work guidance that we were able to talk about them more.*

School leadership and the head teacher's role

School leadership and the head teacher's role are essential in organising schoolwork and participation in the school community. The school was experienced by teachers as a multi-professional workplace, and fluent collaboration between all school professionals was considered meaningful both for the teachers' own well-being as well as the students' well-being. Even so, the analysis identified situations where collaboration did not function and had negative effects on well-being. In addition, it was evident that school structures can either advance or complicate teachers' expertise in well-being. In the Finnish school system, the first six grades (ages 7-13 years) are usually taught by the class teacher for most subjects, and the last three grades (ages 13-16 years) are taught by subject teachers. The latter three years are divided into four to five periods. This periodical teaching or class teacher system has both positive and negative effects. Nevertheless, the teachers recognised that they can also influence how much they work alone, together or in teams and share their practices, experiences and expertise. Furthermore, school resources, such as time, conditions, practices and the pedagogical expertise of the school community, seemed to be a meaningful element in developing collaborative expertise in school well-being. School size and other local circumstances were also considered to affect teachers' work. Schools in Finland have municipal and local autonomy. Therefore, school leadership and the head teacher's role were seen as important for organising schoolwork and gaining and sharing resources. In the teachers' experiences, the head teacher had an impact on advancing participation, communication and actions throughout the school community, such as between teachers, parents, study advisers or school nurses and psychologists. As one teacher stated about organising in-service training:

H26: *Well, then I guess the message for those decision-making bodies has got to be – you can't assume people will on top of their normal working time have the energy to go planning and developing things if you don't offer training days, financial support and opportunities.*

Elements for developing teachers' collaborative expertise in school well-being

The second research question was: What are the key elements in a programme designed to support the development of teachers' collaborative expertise in school well-being? The elements named in Table 1 consisted of five interrelated subthemes, which formed three themes.

The first theme was identified and named (I) *Courage to accept uncertainty*. It was condensed from these subthemes: (1) Need for concretisation of practices, (2) Time management dilemma and (3) Emotions, in particular an emotional load including uncertainty, anger or feelings of inadequacy. The theme (I) *Courage to accept uncertainty* raised from difficulties to solve complicated and multidimensional problems. Acquiring theoretical knowledge for problem-solving seemed challenging and frustrating. On the other hand, insufficient time limited the possibilities to solve problems and teachers missed quick and easy solutions. Therefore, a sufficient understanding of how teachers manage and tolerate complicated situations during a busy school day and among fluctuating emotions could be a solid orientation towards a reflective, broad and resilient school culture.

The second theme was (II) *Understanding school culture as a constant and complex development process* consisting of three subthemes: (2) Time management dilemma, (3) Emotions at school and (4) Participatory and involving approach. This theme (II) *Understanding school culture as a constant and*

complex development process was based on ethical questions regarding the focus of teachers' profession and the most important result of it: academic learning or upbringing of students' social skills. Teachers felt that even when they had some knowledge, they did not have enough courage to use it. Moreover, they felt that they had good interpersonal skills in their work, but collaboration with colleagues, students or students' parents often loaded exhausted and frustrated emotions. Nevertheless, they emphasized collaboration, participation and pedagogical discussions to be important for their own well-being. A lack of time as a part of ethical considerations is a constant issue in the teaching profession, and it can also be frustrating. However, it is crucial to be able to adapt to it. Moreover, school culture includes communication with students, colleagues and guardians and presumes understanding and accepting complexity as part of school culture, in other words, reflective, broad and resilient thinking.

The third theme (III) *Educational leadership* enables development and changes in school culture was based on subtheme (4) Participatory and involving approach and the subtheme (5) School leadership and head teacher's role. The teachers recognised the existence of various subcultures among students, homes and colleagues and felt social pressure when trying to zigzagging among these cultures. At the same time, they realised their role as pedagogical leaders with their students and also with home-school collaboration. Furthermore, they found that school structures can be a burden to collaborate and share expertise with colleagues and in trying to enhance students' well-being. Most of all, they found the headmaster's role as a leader essential in gaining and sharing resources. The teaching and learning environment need to be planned and guided such that each teacher, as a pedagogical leader, can implement their work as smoothly as possible, considering the structures, subcultures and local conditions of their school. School as a workplace with cultural differences and conditions challenges leadership skills, not only the headmaster's leadership but also teachers' pedagogical leadership among their students. In addition, the school is a multi-professional workplace where a reflective, broad and resilient school culture enables the sharing of pedagogical expertise but also collaborative expertise of more complex phenomena like school well-being.

We found the abovementioned three themes to be key elements in a program designed to support the development of teachers' collaborative expertise in school well-being. We combined these intertwined three themes and outlined the main theme of the whole study: Reflective, broad-minded and resilient school culture. We argue that teachers should recognise and critically reflect on their existing competence among colleagues and on the situation and conditions of the existing school culture before they can start to push the boundaries of expertise higher and wider. In addition, if one wishes to dare try something new and previously untried, there must be a sufficiently permissive atmosphere for new experiments within the community or, at least, among colleagues.

Competent educational leadership has an important role in renewing school culture and practices (Spillane, 2004). It can enable the ability to tolerate uncertainty and resiliency in school culture. Educational leadership is required in organising schoolwork and participation in the school community, as well as other resources for everyday schoolwork. One example of this is the range of different and disconnected programs and models implemented by school leaders, but quite often these programs are not shared or utilised by teachers or by the school community as a whole (e.g. Fullan, 2016; Pyhältö et al., 2012).

In summary, school leaders and teachers need at all times to reflect on their practices, values and resources and consider the meanings and influences of their actions, and they need to lead and involve the entire school community in this. Besides, advancing school culture towards well-being requires collective resilience in the face of change and an open-minded and tolerant attitude towards all members of the school community.

Discussion

The aim of the present action study was to examine the essential issues in a program designed to support the development of teachers' collaborative expertise in school well-being. The study confirms that it is relevant to collaboratively reflect on well-being expertise, as it is essential for students' academic and social achievement as well as for teachers' own well-being. The study emphasized the powerful role of collective input and a shared mindset in creating teachers' expertise of well-being in the changing circumstances in schools, as indicated by previous studies (Ahtola et al., 2012; Burke, 2020; Toom et al., 2015; Wenger, 1999).

Through thematic analysis (Table 1), we formed five categories related to developing collaborative expertise in school well-being: (1) Need for concretisation of practices, (2) Time management dilemma: perceived lack of time vs. need to invest time in well-being, (3) Emotions at the school, (4) Participatory and involving approach for students, parents and multi-professional colleagues and (5) School leadership and the head teacher's role in organising schoolwork and participation in the school community, which teachers experienced as meaningful in developing their collaborative expertise in the school well-being program. Moreover, we identified three intertwined themes affecting teachers' active role and possibilities in regenerating school culture: (I) Courage to accept uncertainty, (II) Understanding school culture as a constant and complex development process and (III) Educational leadership that enables the development and renewal of school culture. Finally, we formulated the main theme: *Reflective, broad-minded and resilient school culture*, which is essential for developing teachers' collaborative expertise in school well-being.

Developing expertise is an essentially progressive phenomenon that involves learning that breaks boundaries (Bereiter & Scardamalia, 1993; Hakkarainen et al., 2004; Hatano & Inagaki, 1992, Krampe & Charness, 2018) and creates synergy (Langlois, 2020); therefore, it requires the courage to accept uncertainty (Ericsson, 2008), as found in our first theme. We argue that developing collaborative expertise can require even more courage because of the nature of the process, which reveals ignorance and inexperience in a community and among colleagues and demands understanding school culture as a constant and complex development process. Therefore, when forming collaborative expertise in school well-being, making mistakes should be accepted as an integral part of the development, and participants should encourage each other to contribute fully without fear or embarrassment of making mistakes (Burke, 2020). Thus, a participatory approach for teachers involves a lot of interaction and complex situations.

The second theme, understanding school culture as a constant and complex development process, presumes that teachers should have the courage to operate in uncertain conditions and the possibility to experience meaningful learning opportunities. Moreover, they should have possibilities to learn both as individuals and collectively, at work and from work, even though this can be a hard, painful process (Taxer & Frenzel, 2015). Emotions, uncertainty and complexity should be considered when aiming to make any educational change or effort to develop the school culture (Fullan, 2016; Tynjälä et al., 2016). A constant and complex development process enables the development and strengthening of collaborative expertise in school well-being among the whole community in the long term (Vangrieken et al., 2015). A participatory approach to the development process involving the whole school community presumes educational leadership and teachers, together with other school professionals, committing to reflect on and renew their practices and to adopt new ways of thinking and reflecting school culture as well as renewing it (Postholm, 2012; Yada & Jäppinen, 2019). Regarding the third theme, educational leadership is needed to enable and lead expertise development wherein individuals influence a group of other individuals and where interaction, sharing and collaboration are reflected on and reacted to by all actors in the school community (Hanhimäki, Alho, Nuora, Risku, Fonsén, Mäkiharju, ... & Korva, 2024; Yada & Jäppinen, 2019).

In summary, *a reflective, open-minded and flexible school culture* is essential in developing teachers' collaborative expertise in school well-being. It is important that every member of the community can feel safe and involved in the development of the school culture, even when goal-oriented development and synergy require listening to conflicting perspectives (Slemp, Field, Ryan, Forner, Van den Broeck, & Lewis, 2024; Tynjälä, 2022). According to our results, teachers must first recognise and critically reflect on their existing competence, situation and the conditions of their school culture before they can start to push the boundaries of expertise higher and wider. In addition, if one wishes to try something previously untried, there must be a sufficiently permissive atmosphere for experiments within the community and among colleagues as well as for negotiation and debate (Engeström, 2018, p. 253; Tynjälä et al., 2016).

The results are in line with previous studies indicating that engaging teachers to learn at and from their work can either strengthen or hinder the development of collaborative expertise in well-being depending on the school culture and the execution of the program (Langlois, 2020; Ronen & Kerret, 2020; Soini, Pyhältö, & Pietarinen, 2010; Vangrieken et al., 2015). As previous studies have shown, the development of collaborative expertise and workable practices also requires educational leaders to commit to the change (Fullan 1993, 2016; Remorosa & Paglinawan, 2024; Spillane, 2004). Developing collaborative expertise in school well-being and changing the school culture can be a demanding mission (Burke, 2020; Postholm, 2018; Svane et al., 2019; Vangrieken et al., 2015). Every school has its own culture and subcultures, some of which are formal and explicit, but some of which are also informal, hidden and difficult to detect. This requires a constant, reflective development process where teachers are active actors and change makers of their own work (Fullan, 2016; der Heijden et al., 2015; Toom et al., 2015)

Limitations and future studies

There are some limitations in the present study. First, all school personnel participated in the program in the primary school while, at the lower secondary school, only one-third of the teachers participated due to limited school resources. When the study was planned, the head teacher and all personnel were to participate as a team. However, at the start of the project, a new head teacher was appointed, and many other concurrent projects were underway. The teaching staff and the new headteacher, therefore, decided that only those teachers and class tutors working with students in the seventh grade (ages 13-14 years) should participate in the study. Second, while the duration of the school well-being program can be considered quite long for teachers, it is still a relatively short time period in which to attempt to achieve long-term effects. This study was carried out over one and a half academic years, which is a short period to show long-term changes. Therefore, the aim here was not to uncover change but to describe the mindset, attitudes, aims and conditions through which, and in the longer term, a change in school culture might be possible.

These results are in line with previous studies and place particular emphasis on the courage to pursue an accepting, permissive atmosphere in which there is also room for error, uncertainty and learning from mistakes (e.g., Jäppinen et al., 2016; Postholm, 2012; Remorosa & Paglinawan, 2024). Furthermore, the results of this study confirm other findings from studies of the same school well-being program (Ukskoski, 2013; Ukskoski, et. al., 2025). According to this study, school well-being along with teachers' well-being at work was enhanced by the opportunity to share their expertise in their work and in the school community and to engage in pedagogical discussions about challenging situations with their colleagues — as Wenger (1999) describes it, participate in an ongoing social activity.

The complexity of executing the program amid busy school life and the complicated nature of well-being calls for caution in interpreting and applying our results. Finally, because of the small sample size, the generalisation of the findings also requires careful consideration due to the context-specific nature of the study. In future research, it would be meaningful to explore the concept of collaborative expertise

in more detail, as well as the holistic concept of school well-being. For future research, it could also be an enriching perspective to study the multi-professional personnel in a school community and their workplace learning and collaboration. Similarly, educational leadership and school culture for developing collaborative expertise are interesting areas for future studies.

Conclusion

Teachers' working environments are constantly changing, including a high turnover of teachers, substitute teachers and other personnel, as well as various ongoing projects, programs and financial issues in an increasingly multicultural and complex world. Additionally, teachers encounter in everyday school life variable situations of interaction, where educational leadership is needed. According to this research, the teachers experienced schools as multi-professional workplaces with a variation of individual and pedagogical expertise, where many professionals work in isolation and struggle alone with the same problems. However, both teachers and school leaders value a collaborative approach in their in-service training and see themselves and their colleagues as open to changes in their school culture. Also, programs should be implemented in a process-oriented way as continuous development rather than as individual programs.

It is also important that teachers, both as individuals and as a working community, have the opportunity to participate in in-service training and to build their careers from the induction phase onwards. In conclusion, we encourage teacher educators, educational researchers and educational policymakers to rethink and reorganise initial teacher training, teachers' induction phases and in-service training from the perspective of expertise and educational leadership studies. Novel methods and practices and more holistic programs are needed to enhance school well-being at the level of the whole school community.

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