



Interprofessional practicum in the context of Finnish early childhood education and care

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ABSTRACT: At present, interprofessional collaboration is the agenda for progression in the Finnish ECEC field. Supporting students' professional development toward interprofessional collaboration during the pre-service time is regarded as important. This study examined interprofessional practicum in ECEC centres and explored both students' and mentors' perceptions on it. Focus group discussions were analysed through content analysis. The results revealed that students and mentors perceived interprofessional practicum as important in terms of professional development. The most rewarding experiences were related to the students' joint assignment, the Topaasia game, and the students' peer support. The negative experiences were related to organisational issues that complicated the preparation for the practicum period and limited collaboration between students. For appropriate implementation, the interprofessional practicum still requires long-term progression. Based on students' and mentors' perceptions, recommendations for organising interprofessional practicum in ECEC centres are presented.

Keywords: interprofessional practicum, interprofessional collaboration, early childhood education

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Introduction

In many countries, the professionalism of early childhood education and care (ECEC) has undergone reform in recent decades (e.g., Cervantes & Öqvist, 2021; Harwood et al., 2013; Keary et al., 2020; Ukkonen-Mikkola et al., 2020). In 2013, ECEC in Finland was administratively integrated into the children's learning pathway under the administration of the Ministry of Education and Culture. Since then, the importance of pedagogy in the combination of education, care, and teaching has begun to be increasingly emphasised (Act on Early Childhood Education and Care, 540/2018).

As a continuation of these changes, in 2018 the ECEC teams' organisational structure was reformed (Act on Early Childhood Education and Care, 540/2018). The ECEC teachers' occupational title was divided into two separate titles. Earlier, in addition to ECEC teachers with a bachelors' degree in educational sciences (trained in university), social pedagogues with a bachelor's degree in health care and social services (trained in a university of applied sciences) also had a right to act as a teacher in ECEC. Since 2019, a degree from the university of applied sciences has led to the qualification of social pedagogue in ECEC (Act on Early Childhood Education and Care, 540/2018). The goal is that, by 2030, the ECEC team will consist of either two teachers and one childcarer, or one teacher, one childcarer, and one social pedagogue. This reform aims to raise the level of staff training and clarify and promote the use of the professionals' various expertise to strengthen the quality of ECEC (Ministry of Education and Culture, 2021).

In ECEC centres, professionals are expected to implement interprofessional collaboration, which means collaborating by combining each professional's various expertise and competence for providing high-quality education (Anderson, 2013; D'Amour et al., 2005; Karila, 2012). However, previous research has highlighted the challenges of interprofessional collaboration and the use of each professional's expertise in organising teamwork (Campbell-Barr, 2018; Cervantes & Öqvist, 2021; Chong & Lu, 2019; Steinnes, 2014). The discourse also appears to be delicate and involves conflicting interpretations (Cervantes & Öqvist 2021; Heikka et al., 2021; Kahila et al., 2023a; Karila & Kinos, 2012), particularly concerns that one profession is valued more than another. Furthermore, based on earlier research, education and training programmes do not prepare students for interprofessional collaboration (Almendingen et al., 2021; Dobbs-Oates & Wachter Morris, 2016).

Indeed, increasing the understanding of interprofessional collaboration during initial education is considered important (Anderson, 2013; Äikäs et al., 2022). Boosting collaboration is widely emphasised in the Finnish ECEC field and education and training

programmes (Ministry of Education and Culture, 2021). This study seeks to respond to this improvement work by exploring interprofessional practicums. The interprofessional practicum was designed to promote interprofessional collaboration and learning among ECEC students from different educational backgrounds. Both students' and their mentors' perceptions on interprofessional practicum were explored in this study.

Interprofessional collaboration

Interprofessional collaboration refers to collaboration among professionals, usually with different educational backgrounds, who work together to achieve specific common goals (D'Amour et al., 2005). It is based on the idea that by combining the expertise and knowledge of different professions, the community's overall expertise can be strengthened and common goals can be achieved with higher quality (Nancarrow et al., 2013). Collaboration among different professionals is often referred to as both multiprofessional and interprofessional collaboration, which are used interchangeably at times (D'Amour et al., 2005; Wong & Press, 2017). In this study, the term "multiprofessional" relates to the combination of teams with different professions, whereas "interprofessional collaboration" specifically denotes the collaborative work among these ECEC professionals. Usually, ECEC centres' work communities themselves are multi-professional (Wong & Press, 2017). For example, Finnish ECEC centres involve teachers, childcarers, social pedagogues, special teachers, directors, and assistants (Karila, 2012; Äikäs et al., 2022). In addition, interprofessional collaboration is practiced with professionals outside the ECEC centre, such as health care and child protection professionals (Wong & Press, 2017). This study focuses on researching a practicum model in which teacher students, childcare students as well as social pedagogue students can practice ECEC centres' team-level interprofessional collaboration.

Different expertise and science bases distinguish professions from each other and are expected to influence how professionals perform their work (Freidson, 2001). Fragmentation of discipline differences among different ECEC professions is considered a central challenge in ECEC (Campbell-Barr, 2018; Hordern, 2016). According to the latest reports (Karila et al., 2017; Ministry of Education and Culture, 2021), professionals in Finnish ECEC teams are seen to have both common and differentiated expertise. Common expertise consists of an understanding and competence related to the basic task, ethical principles, the operating environment, and collaboration and interaction. Knowledge of children's development, pedagogy, and teaching are at the core of ECEC teachers' expertise. Due to their pedagogical expertise, teachers are responsible for the pedagogy in their teams, and therefore leadership skills are also expected from ECEC teachers (Heikka et al., 2022). Social pedagogues have a unique understanding of social pedagogy

and collaboration with families and the broader social sector. The childcarers' differentiated expertise is, in turn, linked to care and health for taking care of the children's overall well-being. (Karila et al., 2017; Ministry of Education and Culture, 2021.)

A positive attitude and respect towards other professions as well as understanding of each other's roles in collaboration form an important basis for interprofessional collaboration (Dobbs-Oates & Wachter Morris, 2016). Although the teams' multiprofessional composition is seen as a quality factor in ECEC (Kahila et al., 2023a; Karila & Kinos, 2012), research has shown that, on a practical level, the professionals' differentiated expertise is often unutilised in teamwork (Campbell-Barr, 2018; Cervantes & Öqvist, 2021; Chong & Lu, 2019; Steinnes, 2014). Instead, responsibilities and roles in teamwork seem unstructured and are often based on an "everyone does everything" approach (Onnismaa et al., 2017; Peltoperä et al., 2020). A lack of understanding of professional roles and an inability to bring out one's differentiated expertise can prevent a team from functioning effectively (Nancarrow et al., 2013). Differences in responsibilities between professionals (Kahila et al., 2023a; Karila & Kinos, 2012), and such concerns may, for instance, limit teachers from exercising pedagogical leadership in their teams (Cervantes & Öqvist, 2021).

Successful interprofessional collaboration also requires joint reflective thinking, in which professionals assess and discuss their practice critically and by making each other's professional views and knowledge visible and useful (Nancarrow et al., 2013; Rose & Norwich, 2014). Tensions between professionals' views are normal, but through joint analytic discussions, these dilemmas can provide possibilities to reframe and broaden understanding of the common work (Rose & Norwich, 2014). Through reflective discussion, professionals can ensure that decisions made are based on professional knowledge (Hordern, 2016).

Given the challenges and ambiguities surrounding interprofessional collaboration in ECEC, enhancing the professional development of ECEC professionals in this area is considered essential (Anderson, 2013; Chong & Lu, 2019; Ministry of Education and Culture, 2021; Äikäs et al., 2022). Notably, for fostering interprofessional collaboration, interprofessional education is seen as a valuable approach to professional development (Almendingen et al., 2021; Dobbs-Oates & Wachter Morris, 2016). Next, interprofessional education is discussed in more detail.

Interprofessional education

Interprofessional education occurs when two or more members of different professions learn together, with, from, and about each other (Anderson, 2013). Interprofessional education aims to increase professionals' knowledge, attitudes, skills, and behaviours concerning interprofessional collaboration (Barr et al., 2016). The origins of interprofessional education are rooted in the field of health care (see Buhse & Ratta, 2017; Dobbs-Oates & Wachter Morris, 2016; Fox et al., 2018; Hovland et al., 2018; Sanko et al., 2020), but it is increasingly being applied to the social service disciplines and the field of education as well (see Cassidy et al., 2020; Floyd & Morrison, 2014; Lakkala et al., 2017). Initially, interprofessional education tended to focus on in-service professionals. The basic idea was to first prepare for one's own profession and its speciality before learning and collaborating interprofessionally (Dobbs-Oates & Wachter Morris, 2016). Nowadays pre-service time is also understood as an important period for interprofessional learning.

The impact of interprofessional education has been considered positive in terms of educational objectives (e.g., Cassidy et al., 2020; Davis et al., 2015; Fox et al., 2018; Semple & Currie, 2022). For example, interprofessional education has been found to improve interprofessional collaboration and interaction skills, and to lower prejudices towards other professions (e.g., Shrader et al., 2013). It has promoted an understanding of the importance of interprofessional collaboration and the expertise and roles of other professionals (e.g., Buhse & Ratta, 2017; Cassidy et al., 2020; Hovland et al., 2018; Sanko et al. 2020; Semple & Currie, 2022). The silo phenomenon, which in this case refers to training students from different educational institutions in isolation from each other as well as each training programme's own curricula, traditions, and cultures, may act as barriers to implementing interprofessional education (Barr et al., 2016; Borg & Drange, 2019).

Positive results have also been found in interprofessional education implemented in the ECEC context. In the studies of Anderson (2013) and Almendingen and colleagues (2021), for example, interprofessional education had contributed to the identifying of the expertise and responsibilities of one's own future profession. Understanding of the others' professions, however, was weaker. Indeed, in order to also identify the other professionals' expertise, Almendingen and colleagues (2021) proposed a case-based activity in which students share their expertise and listen to each other's perspectives around a particular case.

Various courses have provided the context for interprofessional learning among students from different educational institutions (e.g., Almendingen et al., 2021; Anderson, 2013;

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Äikäs et al., 2020). In this study, the idea of interprofessional education was utilised in the practicum context (see also Dobbs-Oates & Wachter Morris, 2016; Lakkala et al., 2017). The term "practicums" in this study refers to training periods that take place in a real-world setting, enabling students to observe the work of their future professions and apply the theory they have learned into practice (Mena et al., 2017; Vartuli et al., 2016). Practicums are considered as an essential part of education and training programmes, and their importance for professional development has been found in many studies (Johnston & Dewhurst, 2021; Mena et al., 2017; Puroila et al., 2021). In the ECEC context, interprofessional practicum has been studied by Shaffer (2018). In her study, students practiced external interprofessional collaboration in ECEC, whereas in this study, the focus is on interprofessional collaboration within the ECEC team.

This study approaches interprofessional practicum from the perspective of students and their mentors. In this study, the term "mentor" refers to the professional within the practicum community who is responsible for guiding and mentoring the student's practice and learning (see e.g., Puroila et al., 2021). For instance, the mentor's role involves guiding the student in his or her practicum tasks, fostering reflection, facilitating familiarization with the practicum setting, and promoting involvement in the work community and teamwork (Ambrosetti & Dekkers, 2010; Puroila et al., 2021). The mentor's role is considered highly significant in the practicum process (LaParo & Siskind, 2022; Mena et al., 2017; Puroila et al., 2021; Vartuli et al., 2016). Moreover, particularly in the ECEC context, the value of the work community is emphasised in terms of the development of students' professional identities, as well as their teamwork and cooperation skills (Johnston & Dewhurst, 2021; Kaarby & Lindboe, 2016; Kahila et al., 2023b). Thus, the significance of the practicum community appears to be particularly important for learning interprofessional collaboration (Kahila et al., 2023b).

The current study

Research aim

The main aim of this study was to explore interprofessional practicum as a method to promote ECEC students' professional development toward interprofessional collaboration. This qualitative study approached interprofessional practicum from the students' and mentors' perspectives. The research questions were as follows:

1. How did the students and their mentors perceive the interprofessional practicum?

2. How should interprofessional practicum be improved from their perspective?

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Three phases of implementing interprofessional practicum

This study is part of a design-based research project that aimed to develop an interprofessional practicum suitable for ECE settings (see Anderson & Shattuck, 2012). The overall aim of the interprofessional practicum was to promote students' professional development towards interprofessional collaboration. The idea was to support students in recognising their own expertise as well as that of other professions, thereby increasing appreciation towards each ECEC profession. The planning of the interprofessional practicum was attended by teachers and researchers from the university, the university of applied sciences, and the vocational college, as well as leaders and teachers from ECEC centres. Students were also consulted during the planning. The interprofessional practicum was implemented in three phases in the academic year 2020–2021 (see Figure 1), and improved step by step using knowledge and feedback from previous phases (Anderson & Shattuck, 2012; Ormel et al., 2012). The length of the joint period varied from two to five weeks.

THE FIRST PHASE IN AUTUMN 2020

Participants: 3 ECEC centres 		THE SECOND PHASE IN AUTUMN 2020		
13 mentors14 students		rticipants: 5 ECEC centres		THE THIRD PHASE IN SPRING 2021
 Before practicum: Mentor training in spring 2020 Info brochure 	• 9 Bei	³ mentors ⁹ students fore practicum: Mentor training in		rticipants: 9 ECEC centres 0 mentors 3 students
During practicum: • Topaasia 1 & 2 • Joint assignment • Focus groups	• • Du	autumn 2020 Info brochure Orientation video ring practicum: Topaasia 1 & 2	Bef • • Di	fore practicum: Earlier mentor trainings Info brochure uring practicum:
	•	Joint assignment Focus groups		Orientation meeting Topaasia 1 & 2 Joint assignment Focus groups

FIGURE 1 Implementing interprofessional practicum in three phases

Before the first and second phases, the mentors participated in mentor training. At each phase, an info brochure containing information about the interprofessional practicum was emailed to students and mentors. In the second phase, an orientation video was used to support the information. In addition, in the third phase, an orientation meeting was

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added to the very beginning to clarify the overall aims of the interprofessional practicum. In this meeting, the upcoming practicum was discussed with the coordinator from the university. During this meeting, the participants also got to know each other and discussed their education and training programmes.

During the practicum period, the participants played a design game called Topaasia, which has been developed as a tool for improving teamwork in organisations and work communities (see Hämäläinen et al., 2022). The use of the game was justified because the discussions between previously unknown people required a joint activity to foster a dialogue, and design games can provide a structure for discussion and support for sharing new ideas (Hannula & Harviainen, 2018). In the first game, the students and their mentors played the game together. The discussion topic in the first game was teamwork in the practicum ECEC centre. The second game involved students only, and the discussion topic was chosen by students.

Students also had a joint assignment, which aimed to guide students to recognise each other's differentiated expertise and to help make use of it in ECEC work. Students and mentors were instructed to consider the joint assignment's theme themselves, taking into account the ECEC centers' settings and the students' practicum procedures. As a joint assignment they, for instance, planned and implemented a yard event for the children and their parents. Finally, focus group discussions were organised to involve students and mentors in the evaluation and improvement of the interprofessional practicum (Bourne & Winstone, 2021).

Participants

A total of 65 participants were involved in this study. Students who participated in the study were ECEC teacher students (n = 22), childcare students (n = 14) and social pedagogue students (n = 2). There was variation in how many practicums the students had already completed. The study involved 27 mentors, 22 of whom had completed mentor training designed for interprofessional practicum. The students were recruited through contact persons in educational institutions, while the mentors were recruited either during the mentoring training or with the assistance of leaders in ECEC centres. Three ECEC centres were involved in each implementation phase. Two centres participated in both the first and third phases, and thus, four mentors from the first phase were also involved in the third phase.

The research permits were requested from all the educational institutions and municipalities involved in the study. Individual consent was asked from each participant. The aim was that the interprofessional practicum does not impose an additional burden

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on students, and therefore the students were informed that assignments and discussions carried out during the interprofessional practicum should be part of the students' practicum course. The study followed ethical guidelines and practices. Data security was carefully ensured, and the participants' anonymity was safeguarded.

Data collection and analysis

The data used in this study were collected through focus group discussions (see Nikander, 2012). Students and mentors were in separate groups, and the groups were assigned based on the ECEC centres where the students were conducting their practicums. The purpose of these focus group discussions was to produce an open and honest discussion and to avoid a power structure between the researcher and participants (see Devotta et al., 2016). Therefore, the focus group discussions were implemented without the researcher's presence. The researcher gave the instructions and discussion themes to the participants, started the recording, and exited the room. Written instructions and discussion themes were also provided to the participants. The themes encompassed students' collaboration, mentors' roles, the significance of the practicum community, Topaasia games, joint assignments, successful and rewarding aspects, challenges and problems, and needs for improvement. Participants were instructed to discuss the given themes and then identify and document three main areas of improvement for the interprofessional practicum and its implementation. The selected areas of improvement had to be justified, and participants were instructed to consider how to improve the identified areas. Some of the discussions were implemented outside or via Teams software due to the restrictions caused by the COVID-19 pandemic.

Focus group data were transcribed, pseudonymised, and uploaded to Atlas.ti software, which was utilised as a tool for analysis (see Hwang, 2008). The data were analysed through content analysis to identify meaningful characteristics relevant to the research question (Elo & Kyngäs, 2008). One researcher had the primary responsibility for the analysis, but the interpretations made were regularly discussed with the other three researchers for strengthening the reliability of the analysis (Carter et al., 2014). Also, with the purpose of ensuring validity, quotes from the focus groups are used to illustrate the identified categories.

CODING	CATEGORISING
 Identifying relevant expressions Colouring the expressions in the transcripts Coding: the implementation phase who is speaking what is said 	 Creating code groups Grouping codes based on the similarities and differences in the code contents Creating main categories The first research question: five themes around the reflection of experiences The second research question: four aims for improvement Creating subcategories The first research question: positive and negative experiences The second research question: the needs, ways and reasons for improvement

FIGURE 2 The process of analysis

The content analysis used an inductive approach and followed the description by Elo and Kyngäs (2008). In the first stage (see Figure 2), expressions related to the research question were identified and coded. Codes contained information about the implementation phase, who spoke, and what was said. This made it possible to analyse how views differed between students and mentors and between the three phases of the implementation. After that, the codes were grouped in accordance with the similarities and differences in the contents of the codes. In the analysis of the first research question, the code groups were then sorted into five main categories reflecting the themes around which the reflection on interprofessional practicum was focused. The main categories were further divided into two subcategories, one containing positive experiences and the other containing negative ones. Regarding the second research question, the second phase of the analysis involved identifying four main categories describing the improvement objectives of interprofessional practicum. All the main categories were then further divided into three subcategories: one reflecting the need for improvement, the second the ways of improvement, and the third the reasons for the improvement.

Results

This study investigated the interprofessional practicum through the eyes of students and mentors. The results are presented in two sections. The first section discusses the positive and negative experiences expressed by both students and mentors. The second section explores their suggestions for improving the interprofessional practicum.

Positive and negative experiences of the interprofessional practicum

Students and mentors assessed the interprofessional practicum period in terms of the necessity and importance, professional development, organisation, workload as well as mentoring (see Figure 3). These themes contained both positive and negative perceptions that are described next. Likewise, the following subchapters present the similarities and differences between students' and mentors' perspectives and experiences.

STUDENTS' AND MENTORS' VIEWS ON INTERPROFESSIONAL PRACTICUM					
Positive experiences		Negative experiences			
 Important for the future profession Important for the ongoing improvement work in the ECE field 	NECESSITY AND IMPORTANCE	(No negative experiences on this theme)			
 Promoted mutual understanding, appreciation and a sense of togetherness among different professions The designed content supported practicing teamwork and demonstrated the importance of interprofessional discussion 	EXPERIENCES OF PROFESSIONAL DEVELOPMENT	 Did not meet expectations for identifying and using professionals' differentiated expertise in teamwork The limited collaboration among students challenged practicing teamwork 			
 Mentor training and the orientation video and meeting supported preparation 	ORGANISING	 Weak information and preparation Limited collaboration by the low practicum period concurrency and student isolation 			
Meetings between students provided peer support	WORKLOAD	 Stressful for students, if not included in the practicum course The meetings burdened mentors and their team members 			
 Satisfaction with mentoring and work communities as practicum environments Mentors' collaboration provided peer support for the mentoring 	MENTORING	 Insufficient and unclear mentoring on interprofessional collaboration Ambiguity surrounding interprofessional collaboration challenged mentoring 			

FIGURE 3 The positive and negative experiences of the interprofessional practicum

The necessity and importance

The students and mentors involved in each phase considered the idea of the interprofessional practicum to be excellent and important in terms of professionalism in ECEC. They considered learning concerning interprofessional collaboration important for their future professions. They also stressed the need for the interprofessional practicum to strengthen the overall understanding of interprofessional collaboration as well as the appreciation of each ECEC profession. An example from this perspective is the following material quote:

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Emilia, teacher student's mentor: The idea is really good for the future, so that it also bridges these thoughts and differences, so that there is no gap between the professional titles, that we all work with equal importance.

(Phase 3, centre 1)

As the interprofessional practicum was generally regarded as positive and important for professionalism in the ECEC field, both students and mentors desired more opportunities to engage in interprofessional education throughout the pre-service and in-service phases as well.

Experiences of professional development

In terms of professional development, there were mixed experiences with the interprofessional practicum. In this regard, the students perceived it more positively than the mentors. Most students felt that their understanding of interprofessional collaboration and appreciation for different ECEC professions were increased through students' collaboration and the interprofessional practicum's content. Nevertheless, at the same time, several students pointed out that the practicum period did not fully meet their expectations for interprofessional learning, particularly in terms of identifying and utilising professionals' differentiated expertise in teamwork. The following quote exemplifies this experience:

Lilja, teacher student: Probably the last time today I said that the problem is that we do not know what the social pedagogue really does, what the childcarer does, where the areas of responsibilities go.

Tilda, social pedagogue student: Yes, exactly. And I also imagined that the aim of this practicum is perhaps to think about and reflect on future roles and what the role of the ECEC social pedagogue will be. These did not appear in that way.

(Phase 2, centre 5)

Similar dichotomous experiences emerged for mentors as well. However, those mentors who participated in the interprofessional practicum for the second time in the third phase rated this second experiment as more rewarding and successful from an interprofessional learning perspective than the first experiment. Furthermore, the mentors in the third phase felt that the interprofessional practicum was also instructive for the mentors themselves.

When considering the content of the interprofessional practicum, both students and mentors felt that the orientation meeting in the third phase supported familiarization and togetherness among students. The students perceived it had helped them to become acquainted with the studies and expertise of other ECEC professions. The students' joint assignment, in turn, was considered an effective way to practice future teamwork. It also

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provided joy to the children and the work community. The mentors praised the students' initiative in collaborating. The negative aspects were related to the challenges of utilising professionals' differentiated expertise in the assignment.

Similarly, Topaasia games were mostly perceived as rewarding and suitable for the goals of the interprofessional practicum. Students and mentors found the Topaasia fun and refreshing, and it fostered familiarisation and togetherness. From the perspective of interprofessional collaboration, Topaasia games were perceived as structuring the common discussion and reflection as well as demonstrating the importance of interprofessional discussion. Students and mentors liked the possibility of anonymous participation, as it made the situation, including discussing more sensitive topics, safer.

Particularly, the second Topaasia game was pleasing to students. They felt they were able to be more active with peers, while in the presence of the mentors, some of the students were excited to take part in the discussion. Such an experience is described, for example, in the following material quotation:

Anna, childcare student: Well, at least I thought it [Topaasia] was a positive surprise. I was excited at first. I was a bit like what this is going to be like. But especially where we were just students, it was perhaps more such that it allowed us to open up and bring out more of our own thoughts. So, in that first game, it might have just been that you used to follow it from the side and listen to the mentors' views on things. And then maybe it also had the fact that when it was with the mentors that you might not have dared to open all your own views. Maybe you were a little afraid that you would step on mentors' toes if...

Saara, teacher student: Mm. If you say something negative.

Anna: Yeah, too much. That's right.

(Phase 3, centre 2)

However, both mentors and students wondered if the first Topaasia was held too early from the perspective of the student who had recently entered the practicum. Mentors also discussed whether the first Topaasia was too exciting for students. Students, in turn, felt that while they may not have had as much opportunity to participate in the discussion during the first game, listening to the mentors' discussion had provided them with important information about the work community and operating culture in the practicum ECEC centre and the ECEC field in general.

Overall, both students and mentors felt that, in terms of the interprofessional practicum's purpose, the collaboration between students was too limited. It was limited by the low concurrency of practicum periods, as well as the limited amount of common time and

encounters in practicum. Collaboration was also hampered by practising in separate children's groups, as depicted in the following quotation:

Silja, teacher student: But the challenge here was the time together.

Emma, childcare student: *Mm, yep. And that's just that, common time. It was perhaps the biggest. And then also the fact that we were like in different groups and on quite different sides of the house. That is why we are not as randomly seen in that way as we could have been if we had been in the same group.*

(Phase 2, centre 6)

Moreover, the collaboration was challenged by the restrictions related to the COVID-19 pandemic, which sought to reduce contact between people from different children's groups. A few students also found it challenging to collaborate if the students were at different stages of their studies. Although the students' collaboration was lower than expected, the actual collaboration, especially among students, was considered smooth, pleasant, and instructive. Thus, it was hoped for more in the future.

Organising

Regarding organising, students and mentors expressed challenges, especially in terms of information and preparation. Nevertheless, improvements were shown in these areas between the various implementation phases. Both students and mentors raised a lack of information related to interprofessional practicum as a key challenge. They perceived that they got the information about the practicum unexpectedly, which challenged the preparation for the period. Some of the mentors perceived that the mentor training provided information of the interprofessional practicum, while others, especially those who had not participated in the mentor training, highlighted poor introduction. Particular uncertainty was felt about the goals and content of the interprofessional practicum as well as the expectations for mentoring.

Additionally, organisational challenges were linked to varying practicum schedules and procedures amongst training programmes. The placement of students in separate children's groups was also perceived as problematic. Due to the brief shared practicum period and the placement in separate groups, finding time for collaboration was difficult. The following quote highlights the time-related challenges:

Minka, social pedagogue student's mentor: Indeed, the challenge was the limited time they had together, as it was too short for these students. Ideally, they would have had the entire three weeks together. Now, the social pedagogue's practicum is only three weeks, so everyone could start at the same time. But I don't know how it would work out with the schools' scheduling. I don't know, but perhaps that was the challenge, that they started at different times. And of course, the schedules of the different child groups... you have your own life and routines, you preschoolers.

(Phase 2, centre 6)

Uncertainty concerning the interprofessional practicum was emphasised in the first implementation phase. With the feedback, the second implementation invested in information by producing an orientation video that clarified the practices of the interprofessional practicum. In the third phase, an orientation meeting was instead arranged at the ECEC centre for clarifying the content and goals and promoting students' acquaintance. Both the orientation video and the orientation meeting were felt to have supported understanding and preparation.

Workload

Students perceived the interprofessional practicum as both stressful and empowering. Those students who were unaware of the possibility to include assignments and meetings as part of their practicum course found the interprofessional practicum burdensome. Other students, however, expressed that the community of the students had supported them to process difficult experiences and thus also promoted their well-being during practicum. The following quotation reflects students' discussion about how the presence of other students can alleviate the tension associated with the practicum:

Noora, childcare student: I believe that most students would like this [interprofessional practicum]. It's easier to be in a work community when there are people of the same age and such. So that you are not only with the employees if you're nervous or anything. So, it might be easier if there is more doing among the students.

(Phase 2, centre 4)

The mentors, in turn, had found it stressful to arrange time for joint meetings, for example, Topaasia games and an orientation meeting. Leaving the children's group was considered difficult and meetings were perceived as contributing to the workload of the mentors' team members.

Mentoring

Overall, students were satisfied with the mentoring and work communities as practicum environments. However, the students felt that they did not receive sufficient guidance specifically on issues related to interprofessional collaboration. Mentors, in turn, felt

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uncertain about what was expected of the mentoring concerning interprofessional collaboration. Mentoring was also found to be challenging due to the general ambiguity surrounding interprofessional collaboration in the ECEC field, as expressed in the following quotation:

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Hannele, childcare student's mentor: *The role of a teacher is somewhat understandable, that it's more about pedagogy, but what is the role of a social pedagogue in the working life? Isn't it supposed to be something related to family or similar?*

Karoliina, social pedagogue student's mentor: On the other hand, it is currently difficult to think about the social pedagogue's role because we do not have such a role in the work community at the moment.

Eleonoora, teacher student's mentor: *Mm, yes. It's just a title at the moment, the new names.*

Karoliina: Yes, but the current students who are studying to become social pedagogues are the first ones to have this role. At the moment, there are no social pedagogues in the work community. I am also in the role of a teacher and in the future, so, I will always have the title of an ECEC teacher, not an ECEC social pedagogue. Even though I am trained as a social pedagogue, it is difficult for me to mentor future ECEC social pedagogues.

Eleonoora: Yes, it is challenging. I find it exciting that these title changes happened so quickly because, for example, in the ECEC curriculum that guides our work, there is no mention of ECEC social pedagogues. You can't even search for advice on that.

(Phase 1, centre 2)

Few mentors collaborated and supported each other on mentoring issues. These mentors praised the peer support among mentors. For the most part, however, the mentors had not collaborated in any way related to the mentoring. It had either not been considered necessary or it had been difficult to arrange a common time for collaboration.

Needs for improvement

As needs for the improvement of interprofessional practicum, students and mentors emphasised increasing students' collaboration, clarifying instructions, reviewing the workload, and emphasising more interprofessional collaboration (see Figure 4). The ways and reasons discussed by students and mentors for enhancing these improvement needs are presented below.

WHAT TO IMPROVE	HOW TO IMPROVE	WHY TO IMPROVE
INCREASING COLLABORATION BETWEEN STUDENTS	Longer consistency of practicum periods Students in the same or close children's groups By editing content, e.g. students' teams	Opportunity to get to know each other better and deepen collaboration
CLARIFYING INSTRUCTIONS	More effective and proactive information Arranging the orientation meeting Written manual on content-specific goals	Understanding supports appropriate action and promotes preparation, such as arranging space and time for collaboration
REVIEWING THE WORKLOAD	Inclusion of contents in the practicum Investing in students' peer support Consideration of operation culture Enabling peer support between mentors	Important for the motivation and well-being of both students and mentors
EMPHASISING MORE ON INTERPROFESSIONAL COLLABORATION	Representation from each profession By editing content Clarifying the role of mentoring Clarifying the meaning of interprofessional collaboration	Supports and enriches professional development

FIGURE 4 Needs for improvement of the interprofessional practicum

Increasing collaboration between students

For achieving the goals related to interprofessional learning, both students and mentors in each focus group emphasised the importance of increasing collaboration between students. They perceived that a longer joint practicum period would support students' mutual acquaintance and allow for deeper and more multifaceted cooperation. Also, several students and mentors felt that starting practicum periods at the same time could support the enhancing of students' sense of equality and togetherness.

Noora, childcare student: Yeah, and if everyone started at the same time, then everyone would gradually get to know each other better. And not in the way that one student comes in the middle, because then you don't have time to get acquainted. That is, that one student can feel like an outsider.

Katja, teacher student: Yes. It's easily quite an unequal position then.

(Phase 2, centre 4)

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For increasing students' collaboration, practicing in the same or similar children's group was considered very important and discussed in each focus group. It was perceived to provide better opportunities for regular and spontaneous encounters as well as more diverse cooperation. However, the involvement of more than one student in the same children's group also raised a critical consideration of whether it would be too burdensome for children, students, and mentors. A few mentors shared previous positive and successful experiences on such arrangements.

Moreover, both students and mentors perceived that students' collaboration can be increased by modifying the content of interprofessional practicum. More joint assignments and Topaasia games were sought, but above all, more content was needed to guide students to collaborate alongside the activities of the children's group. Furthermore, it was seen as paramount to invest in the students' sense of belonging, for example, by holding weekly student teams where students get to know each other more freely and can reflect on practicum experiences together.

Clarifying instructions

Students and mentors highlighted the importance of clear instructions and effective information. They recommended that information on the practicum reach all parties in time to foster the preparation for the period. With proactive information, mentors, for example, could allocate time for meetings and place students in as near children's groups as possible. The importance of proactive information is illustrated by the following quote:

Ulla, teacher student's mentor: *Finding time together was a challenge.*

Minka, social pedagogue student's mentor: *And in a way, it was such a last-minute thing, whether I would get a student or not, that it was really hard to prepare for it.*

Ulla: The information about the student came at the last minute [reads out loud what she writes on the form]

Minka: So, it's kind of anticipation from the educational institutions and the work community, but also our own anticipation.

Ulla: Yes.

Minka: Just leave a blank space in the calendar.

(Phase 2, centre 5)

The students and mentors from the first and second phases suggested arranging an orientation meeting to clarify the practicum process. This was held in the third phase, and it received positive feedback. Furthermore, mentors and students in each focus group whished clearer content-specific instructions for facilitating preparation. They suggested

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creating a manual that presents the content and goals of the interprofessional practicum from the perspective of the students' and mentors' roles and responsibilities.

Reviewing the workload

For the future, students and mentors recommended reviewing interprofessional practicum from a workload perspective. As expressed in the following quotation, the students considered it important that the assignments and meetings during the interprofessional practicum could be included in their individual practicum assignments so that the interprofessional practicum does not place an additional burden on students.

Amanda, childcare student: Would it [the need for improvement] then be that you could combine it with your own studies even more than the joint assignment? I don't know.

Juulia, teacher student: Consideration for workload or something like that.

Henrietta, teacher student: *Well, could it be about workload? Is it about adapting or fitting in or something? Yeh, workload, yeh, that's what it is, adapting or fitting workload.*

(Phase 3, centre 7)

Simultaneously, students discussed that, at best, interprofessional learning could act as an empowering factor, and therefore they desired clearer guidance from mentors to enable peer activities between students.

The mentors emphasised that the ECEC centres' operating culture should be considered when scheduling the interprofessional practicum, so that the practicum is organised in a manner that does not burden the staff. They also hoped to consider staff resources when organising the practicum. The mentors perceived it as important that they can commit to mentoring without burdening their team members. In addition, they discussed how mentors should be instructed in the future to provide peer support for each other in matters related to mentoring.

Emphasising more on interprofessional collaboration

In each focus group, a clearer emphasis on interprofessional collaboration was highlighted. Firstly, both students and mentors considered it important that in the future each profession of ECEC teams would be represented in the interprofessional practicum. In this case, the combination would be more in line with future work. In this study, social pedagogue students were in the minority, and thus the longing for their participation, as expressed in the following quotation, was emphasised:

Kiira, teacher student: *Somehow, more social pedagogue students would have been needed.*

Hanna, teacher student: Yes. To me, it's at least quite a question mark, what is their role in early childhood education because they used to have that teacher qualification, and now they're not going to have it [...]

Kiira: Yep, and just that social pedagogue. Because they're going to be future coworkers anyway, it would have been nice to have a little experience and knowledge about what it's going to be.

(Phase 3, centre 1)

Further consideration of interprofessional collaboration was also suggested for assignments, discussions, and Topaasia games during interprofessional practicum. Students also desired mentors' support to reflect on the meaning of interprofessional collaboration and utilise each professional's expertise in students' collaboration. They emphasised also how the entire work community's role as part of the practicum environment needs to be strengthened so that students can observe and practice interprofessional collaboration in praxis by interacting and collaborating with community members.

All in all, it was also considered important to clarify the meaning and the practices of interprofessional collaboration both in the operating culture of practicum ECEC centres as well as in the ECEC field in general. The mentors perceived that clarification would support them to guide students in matters related to interprofessional collaboration. Additionally, both students and mentors stressed how important it would be to address interprofessional collaboration more strongly already in education, as part of the courses.

Discussion

This study implemented interprofessional practicum and explored it via focus group discussions, from the students' and mentors' perspective. Increasing knowledge and competence concerning interprofessional collaboration was considered necessary for the improvement of the ECEC field. From the perspective of professional development, the most rewarding experiences were related to the students' joint assignment, the Topaasia game, and the students' peer support. Challenges, in turn, were linked to organisational issues that complicated the preparation for the practicum period and limited collaboration between students. The improvement needs of the interprofessional practicum, as stated by the students and their mentors, included enhancing students' collaboration, clarifying instructions, reviewing the workload as well as fostering more interprofessional collaboration.

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The interprofessional practicum aimed to encourage students' professional development by fostering collaboration between students and mentors from diverse educational backgrounds. As the results show, the interprofessional practicum was seen as important from the perspective of professional development. It was perceived as having potential for promoting professional development and high-quality teamwork, which increased motivation for interprofessional learning (see also Semple & Currie, 2022, Äikäs et al., 2020). Low respect towards ECEC professions and ambiguities in interprofessional teamwork have become great concerns in Finnish ECEC (e.g., Ukkonen-Mikkola et al., 2020), and the motivation towards interprofessional learning was linked precisely to these concerns.

Based on the results, the learning experiences were related to changes in attitudes and increased respect for other professions (see Dobbs-Oates & Wachter Morris 2016; Semple & Currie, 2022; Shrader et al., 2013; Äikäs et al., 2020). Instead, the professionals' differentiated expertise as well as its meaning in teamwork practices remained unclear (see Almendingen et al., 2021; Anderson, 2013). On the one hand, since interprofessional collaboration in Finnish ECEC is under progression, one of the basic ideas in this study was that students and mentors from various educational backgrounds can collaborate to build an understanding of the phenomenon. On the other hand, students and mentors found this too difficult, because there is so much ambiguity associated with interprofessional collaboration in ECEC. The results emphasise the need for clear national guidelines through which both the future professionals and professionals already in working life will be able to build their understanding of the ECEC professionalism (Campbell-Barr, 2018; Chong & Lu, 2019; Hordern, 2016).

Alongside ambiguities, this study also identified other factors that limited the achievement of interprofessional practicum goals. Organising challenges (see Lakkala et al., 2017; Äikäs et al., 2020) as well as the restrictions caused by the COVID-19 pandemic led to fewer collaboration than required and desired. Although the students were in the same ECEC centre, working in different children's groups and the practicum periods starting at different times created the silo between the students (Barr et al., 2016; Borg & Drange, 2019). In contrast to the study by Almendingen and colleagues (2021), in this study, students' age differences did not bother them, but a few students found it challenging if students were at different stages of their professional development (see also Äikäs et al., 2020).

The positive experiences during the interprofessional practicum focused on the students' joint assignment as well as the Topaasia game, both based on the case-type activity recommended by Almendingen and colleagues (2021) (see also Semple & Currie, 2022).

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According to the results, the joint assignment and the Topaasia game appear to have reinforced students' agency, participation, and their role as experts in the practicum community (Semple & Currie, 2022), which are considered important aims, albeit occasionally challenging, in the practicum (Kahila et al., 2023b; Johnston & Dewhurst, 2021). Specifically, the joint assignment supported the practice of concrete teamwork and the sharing of responsibilities. The Topaasia game, in turn, provided both students and mentors with learning opportunities that were linked to a better understanding of the value of common discussion and reflection in teamwork (see, Dobbs-Oates & Wachter Morris 2016; Semple & Currie, 2022). Indeed, discussion and reflection are key prerequisites for quality teamwork (Hordern, 2016; Nancarrow et al., 2013; Rose & Norwich, 2014), and mentors expressed a strong desire for better opportunities for regular discussion among team members than currently exists in ECE settings. Furthermore, the mentors appreciated the opportunities provided by the Topaasia game to hear students' fresh perspectives and knowledge to develop their own expertise and operating culture (Kangas & Ukkonen-Mikkola, 2019; Ukkonen-Mikkola et al., 2021).

Although the main purpose was to promote interprofessional learning, students associated the most positive experiences of interprofessional practicum with peer support provided by the student community. They found it rewarding to be able to discuss their views and experiences with other students. The student community provided a safe place for reflection, especially on issues that students are afraid to talk to their mentors about (see also Kangas & Ukkonen-Mikkola, 2019). Similarly, this study provided indications that when practicum invites several mentors, the mentors may also provide peer support in matters related to mentoring. Such peer support activities could provide a good tool for traditional practicums as well to support students but also mentors with intensive practicum and mentoring expectations (Puroila et al., 2021).

As is typical of design-based research, the participants in this study were strongly involved in the improvement work (Anderson & Shattuck, 2012; Ormel et al., 2012). Focus groups conducted without the researcher's presence can be, on the one hand, seen as fostering opportunities for students and mentors to bring out their own, honest perspectives (Bourne & Winstone, 2021). On the other hand, researchers were unable to ask more specific and in-depth questions on some meaningful discussion topics. Due to their absence, researchers were also unable to observe nonverbal communication between participants (Bourne & Winstone, 2021). It is also worth considering that in focus groups the personal views or experiences of each person may not have been heard, as the presence of each participant has influenced what has been perceived as appropriate to say during the discussion (Nikander, 2012). Moreover, the results are not generalisable due to the small number of participants as well as the locality of the study (Lincoln & Guba,

2000). However, from the perspective of the ECEC field, this study implemented a rather unique but highly topical practicum model, and thus provides new insights for use in future research as well as in the improvement of practicums and mentoring.

Conclusion and implications

Overall, the results of this study, which approached interprofessional practicum from the perspectives of students and their mentors, strongly reflect the ongoing reform in Finnish ECEC. The results indicate that the interprofessional practicum reinforced both students' and mentors' perception of the importance of interprofessional collaboration and their respect for professionals with different educational backgrounds. However, professionals' differentiated expertise and its significance in teamwork remained unclear. Thus, this study confirms the need to promote interprofessional collaboration to support the quality of ECEC (Ministry of Education and Culture, 2021; Ukkonen-Mikkola et al., 2020). Based on this research, it is particularly important to strengthen the identification and utilisation of professionals' differentiated expertise for regular discussion and reflection with team members.

For further implementation, the interprofessional practicum still requires long-term progression. Based on this study, a prerequisite for the interprofessional practicum is a strong organising work and collaboration between educational institutions and practicum ECEC centres for creating a common understanding of the goals, content and scheduling of the practicum. Proactivity plays an important role in organising appropriate resources. It is important that educational institutions agree on common practices for the acceptance of assignments included in interprofessional practicum. The findings suggest that, in order to prevent a silo effect, students participating in the interprofessional practicum should be at roughly the same phase of their studies. Moreover, it is worth paying attention to a sufficiently long common practicum period and placing students either in the same or in closely cooperating children's groups.

Although student collaboration is at the heart of the interprofessional practicum, mentors play a vital role (see also Lakkala et al., 2017). The mentoring in interprofessional practicum emphasises the readiness to guide students to identify and utilise interprofessional collaboration. Understanding the work community's unique importance as a model for interprofessional collaboration and as a learning environment for interaction skills is also central (see Johnston & Dewhurst, 2021; Kahila et al., 2023b). Additionally, mentors play an important role in initiating acquaintance between students

and maintaining their interaction. These matters are important to consider when training mentors. In the future, it will also be good to encourage mentors to cooperate more strongly and support each other in mentoring matters.

This study also provides insights for the further content of the interprofessional practicum (see Figure 5). It is recommended to begin the practicum with a joint orientation meeting to clarify the content-specific goals and foster familiarity among students and mentors. During the first half of the period, it is worth allocating time for students to familiarise themselves with each other and the operating culture. Students should have opportunities to meet each other regularly; firstly, among everyday activities of children's groups, and secondly, in weekly students' teams to reflect on experiences with peers. The Topaasia game can also aid in fostering familiarity and should be scheduled after students have spent some time in the practicum centre.

	THE FIRST HALF	THE SECOND HALF
COMMON DISCUSSIONS	Orientation meeting	Conclusion meeting
STUDENTS' COLLABORATION	Regular collaboration and we	ekly students' teams Joint assignment
TOPAASIA GAMES	Topaasia 1 (students and mentors)	Topaasia 2 (students only)

FIGURE 5 Recommendation for the content of interprofessional practicum

In the second half, the aim is to deepen student collaboration and guide them to make use of each other's expertise in teamwork. During this phase, it is beneficial to play the second Topaasia game and carry out the students' joint assignment with mentors' support in recognising the differentiated expertise of each ECEC profession. This study utilised the Topaasia game (see Hannula & Harviainen, 2018) with positive results. However, in the future, other methods may also be considered that, similar to Topaasia, allow students to reflect on their experiences and perceptions in a case-by-case manner and contribute their expertise to the discussion. If the length of the practicum period allows, there may be more joint assignments and Topaasia games. Regular meetings among students, both

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in everyday activities and in students' teams, are still necessary. At the end of the period, a conclusion meeting is recommended for reflection, feedback, and completion of the practicum.

Interprofessional practicum provides a way to promote students' professional development towards interprofessional collaboration (Dobbs-Oates & Wachter Morris, 2016; Lakkala et al., 2017; Shaffer, 2018). However, there is a need for more information and consideration regarding the type of professional learning that takes place and can be expected from students at different ages and stages of their studies. Moreover, this study suggests that interprofessional practicum can also offer opportunities for in-service professionals develop professionally. Thus, further research could focus on exploring the professional development of in-service professionals as part of the interprofessional practicum.

This study involved teacher students, social pedagogue students and childcare students. As special teachers are also key participants in the ECEC centres' interprofessional communities (see Äikäs et al., 2022), special teacher students could also be involved in interprofessional practicum in the future. Since in this study all students practiced in diverse children's groups, it would be interesting in the future to research interprofessional practicum, where students practice in the same group. Additionally, in this study, students and mentors described their experiences immediately after the practicum period. Further research could focus on exploring how teachers who have participated in an interprofessional practicum during their studies believe the experience has influenced their practices and thinking in the working life.

Acknowledgements

This study was funded by the Finnish Ministry of Education and Culture (OKM/33/523/2019). We would like to express our sincerest thanks to all the students and mentors who participated in the interprofessional practicum.

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