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Abstract:

The purpose of the study is to explore physical education (PE) students' social and emotional learning (SEL) and the meaningful learning experiences during the SEL course. In the teaching profession, understanding SEL is important because the guidance of learning and group dynamics is essentially an interactive social process. Further, previous research shows that focusing on socioemotional skills promotes students' academic achievement. Teachers' SEL skills can be developed by training.

In PE teacher education annually, 60 first-year-students participate in a 20-hours SEL skills course based on Gordon's interaction model and SEL concepts. The course consists of practising SEL skills such as listening, clear self-expression and conflict resolution.

The data was collected before and after the course and consists of the knowledge test and the dealing with challenging interactions (DCI= The Dealing with Challenging Interaction) instrument and learning diaries analysed by qualitative content analysis.

Results indicate that PE students' SEL skills developed, especially in active listening and clear self-expression. Further, students reported improvement in their self-awareness and knowledge of the importance of SEL skills. Students expressed willingness to develop their SEL skills further.

Training on SEL skills in the early stages of teacher education is important in awakening teachers' awareness of the socioemotional aspect of teaching.

Significant in life

Core learning outcomes of a social and emotional course in physical education teacher education

Tommi Mäkinen, Emma Kostiainen and Ulla Klemola

Introduction

In the Finnish physical education (PE) teacher education programme, social and emotional learning (SEL) skills have played a significant role since the beginning of the millennium and have gained a permanent position in the curriculum. Students' annual feedback on their SEL courses has been highly positive. Earlier research has shown that courses that included SEL skills have proven efficient in imparting the knowledge and skills needed in working life ([Tynjälä, Virtanen, Klemola, Kostiainen, & Rasku-Puttonen, 2016](#)) and in enhancing meaningful learning among student teachers ([Kostiainen et al., 2018](#)). In the context of teacher education, meaningful learning occurs when students are engaged in authentic practices as well as in active, intentional, reflective and relational processes ([Kostiainen & Pöysä-Tarhonen, 2019](#)).

A keen understanding of training and learning SEL processes is important for effective implementation of high-quality SEL ([Jones, Bouffard, & Weissbourd, 2013](#)). Further, more research-based understanding is needed on how students personally construct their learning experiences ([Billett, 2009](#), p. 33; [Kostiainen et al., 2018](#); [Okukawa, 2008](#)). In particular, the

evoking of meaningful learning experiences is considered critical in teacher education programmes ([Daves & Roberts, 2010](#); [Kostiainen & Pöysä-Tarhonen, 2019](#)).

This study offers a perspective on meaningful learning by focusing on a required course on a physical education subject for a teacher education programme in a Finnish university. In this chapter, we examine PE students' learning experiences in their first-year SEL course, discussing what was learned during the course and how the students describe their meaningful learning experiences.

Why teachers should learn social and emotional skills

Teaching and learning, interactive social processes by nature, demand skills and understanding of emotions and social interaction. Therefore, teachers' competence in SEL is essential ([Kanning, Böttcher, & Herrman, 2012](#); see also Hargreaves, 2000; [Sutton & Wheatley, 2003](#)). The concept of SEL is considered a worldwide phenomenon with emerging research ([Schönert-Reichel, 2019](#)) and it encompasses knowledge and skills on self and social awareness, emotions and behaviour, responsible decision-making and positive human relationships.

SEL is also a part of the Finnish national core curriculum for basic education ([FNAE, 2014](#); [Lonka, 2018](#)). An [OECD report \(2015, p. 109\)](#) indicates that in many countries, social and emotional skills have become important content in curricula, but the explicit practices to implement the skills are scarce. Nevertheless, there is evidence that focusing systematically on socioemotional skills promotes students' academic achievement in schools ([Durlak, Weissberg, Dymnicki, Taylor, & Schellinger, 2011](#)). SEL programmes implemented in schools may be also long lasting ([Taylor, Oberle, Durlak, & Weissberg, 2017](#)).

SEL interventions in schools do not only teach skills to students, but also include ways in which teachers interact and solve problems ([Talvio & Lonka, 2019](#); [Jennings & Greenberg, 2009](#)). Teachers' socioemotional skills and positive attitudes towards SEL help their engagement and effectiveness in implementing SEL programmes ([Jennings & Greenberg, 2009](#); [Collie, 2017](#); [Collie & Perry, 2019](#)). Despite this fact, SEL research has focused on skills taught to students and not teachers' own socioemotional skills ([Jennings & Greenberg, 2009](#); [Talvio, Ketonen, & Lonka, 2014](#); [Collie, 2017](#)).

Teachers with good socioemotional competence can model behaviours for students (Brackett, Bailey, Hoffmann, & Simmons, 2019) and promote positive academic, social and emotional outcomes among their students ([Collie, 2017](#)). Good socioemotional skills help teachers to maintain good relationships with students ([Jennings & Greenberg, 2009](#); [Aspelin & Jonsson, 2019](#)), which is an important resource for promoting students' academic skill development ([Kiuru et al., 2015](#)). A teacher's socioemotional skills are connected to his/her self-efficacy in classroom management, which seems to affect teaching effectiveness ([Ryan, Kuusinen, & Bedoya-Skoog, 2015](#); [Collie, Shapka, & Perry, 2012](#)). [Swan and Riley \(2015\)](#) suggest that being empathic helps teachers understand their students, as they offer appropriate emotional and instructional support. Altogether, teachers' social and emotional skills support the positive climate and job commitment, motivation and well-being of teachers ([Collie, Shapka, & Perry, 2011](#); [Collie & Perry, 2019](#); [Perry, Brenner, & MacPherson, 2015](#)) and create an atmosphere that supports learning ([Jennings & Greenberg, 2009](#)).

SEL in teacher education

[Aspelin and Jonsson's \(2019\)](#) findings indicate that preservice teachers need to develop more precise understandings of interpersonal communication and how to build the teacher-student relationship in the teaching context. Nevertheless, studies on teaching SEL skills to preservice teachers are scarce ([Schonert-Reichl, 2017](#)), despite the gap between teachers' desire to learn and implement SEL strategies in schools and their SEL studies during teacher education ([Bridgeland, Bruce, & Hariharan, 2013](#), p. 39; [Stipp, 2019](#)). For example, in the US, only a small portion of the 3,916 teacher education courses analysed focused on providing teachers with the knowhow to promote different aspects of SEL ([Jones & Bouffard, 2012](#); [Schonert-Reichl, 2017](#)).

The role of teacher education is essential in promoting SEL skills in order to encourage and help student teachers "to reach their greatest potential and to flourish and thrive" ([Schonert-Reichl, Kittin, & Hanson-Peterson, 2017](#), p. 67; see also [Alvarez, 2007](#); [Schönert-Reichl, 2019](#)). Therefore, it is critical that SEL, based on strong conceptual models and sound research, is embedded into both state-level teacher certification requirements and preservice teacher education ([Schonert-Reichl, 2019](#)).

Teachers' socioemotional skills are not automatically developed through experience, but rather developed by training ([Klemola, 2009](#); [Saarni, 2000](#); [Schonert-Reichl, 2017](#)). For

adequate teacher competency, SEL skills should be learned and practised during teacher education. SEL skills can be learned in short courses, however, such skills are often lost with time, although some skills may be maintained for at least nine months ([Talvio et al., 2014](#)). Previous research on students' SEL courses ([Tynjälä et al., 2016](#)) shows three important principles on the implementation of the course: 1) membership and belonging to the group, 2) active participation and 3) reflecting on experiences in light of theoretical knowledge. Studies demonstrated that programmes developing social and emotional skills need certain principles to be effective: 1) teaching and learning should proceed gradually, step by step; 2) teaching methods are activating and functional; 3) programmes should take place over a long period of time; and 4) there should be clear and individualised goals ([Durlak et al., 2011](#))

A review of previous research revealed at least three kinds of courses or interventions used among teachers or teacher students: 1) those concentrated on emotional competence (Brackett & Katulak, 2007; [Dolev & Leshem, 2017](#)), 2) mindfulness-based interventions (see [Schonert-Reichl, 2017](#); [Jennings, Frank, Snowberg, Coccia, & Greenberg, 2013](#); [Jennings & Greenberg, 2009](#)) and 3) social and emotional skills courses ([Talvio, 2014](#); [Klemola, 2009](#); [Tynjälä et al., 2016](#); [Stipp, 2019](#)). Studies show that teachers and preservice teachers have improved in SEL skills, such as listening (McNaughton, Hamlin, McCarthy, Head-Reaves, & Schreiner, 2007; [Talvio, 2014](#); [Klemola, 2009](#)), emotional competence ([Dolev & Leshem, 2017](#); [Garner, Bender, & Fedor, 2018](#)) and clear self-expression ([Talvio, 2014](#); [Klemola, 2009](#)). Preservice teachers reportedly have improved confidence in classroom management and in handling students' stress ([Stipp, 2019](#)).

SEL in physical education

Why have social and emotional skills been seen such an important part, especially in PE? In PE, teachers' social and emotional skills are considered important support for students' life-long exercise activities through positive experiences in PE lessons (see [Hynynen & Hankonen, 2015](#); [Lintunen & Gould, 2014](#); [Liukkonen & Jaakkola, 2017](#)). PE teachers seem to play an important role in advancing students' leisure activity motivation through autonomy supportive behaviour ([Chatzisarantis & Hagger, 2009](#); [Schneider et al., 2020](#)). In their self-determination theory, [Deci and Ryan \(2000\)](#) point out that in supporting people's basic psychological needs (relatedness, autonomy and competence), their intrinsic motivation grows; this theory is widely used in physical education motivation research ([Ntoumanis & Standage, 2009](#); [Sun & Chen, 2012](#)). Autonomy supportive teaching enhances levels of

motivation compared to non-autonomy supportive teaching ([Leptokaridou, Vlachopoulos, & Papaioannou, 2016](#)).

Emotional support, listening, acceptance of expressed negative emotions and positive feedback, as well as the corresponding students' needs for autonomy, competence and relatedness, are parts of autonomy support ([Cheon, Reeve, & Moon, 2012](#)). Teachers themselves report fewer burnouts when they are more autonomy supportive in their classrooms ([Shen et al., 2015](#)). Hence, it is relevant to supply PE student teachers with sufficient SEL skills and attitudes during their teacher education years.

In this study, we explored the skills PE student teachers report that they learn in an SEL course and assessed the meaningful learning experiences of these student teachers.

Conceptual framework

The concept of personally meaningful learning experiences in this study refers to students' learning processes and to the various contents, events, activities and circumstances that they consider to have a special meaning to them during the course ([Hakkarainen, Saarelainen, & Ruokamo, 2007](#), p. 89; [Kostiainen et al., 2018](#); [Okukawa, 2008](#), p. 47). In creating meaningful learning experiences, this study emphasises authentic practices, active and intentional, as well as reflective and relational processes (see [Kostiainen & Pöysä-Tarhonen, 2019](#)).

Social and emotional learning (SEL) is understood as a process of integrating cognition, emotion and behaviour, both with adults and children, ([Brackett, Bailey, Hoffmann, & Simmons, 2019](#)) and it consists of five elements: self-awareness, self-management, social awareness, relationship skills and responsible decision-making ([CASEL, 2020](#)).

[Lintunen and Gould \(2014\)](#) have linked the SEL model to Gordon's ([2003](#)) model of interaction and conflict resolution (see Figure 9.1).

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Figure 9.1 [Lintunen & Gould, 2014](#). Core competencies of SEL and core skills of Gordon's interaction model

Each SEL area can be supported by the social and emotional skills introduced by Gordon. The main goal of Gordon's model and pedagogy in the school context is to improve

teachers' ability to develop interaction and good relationships with their students ([Gordon, 2003](#)). The SEL areas and skills are introduced more detailed in the following section.

Self-awareness and self-management

I-messages are used to clearly express one's feelings, beliefs and thoughts. I-messages can be divided into declarative, preventive, positive and confrontative messages. I-messages are a useful tool in interaction because they only express the inner reality of the sender and do not include evaluation or interpretations of another's behaviour ([Gordon, 2003](#), pp. 142–146).

Declarative I-messages are a way of expressing one's own beliefs, thoughts, ideas, feelings or reactions to help others understand one's experiences and point of view. For example, instead of saying "the meeting sucked", one could say "I was frustrated about the result of the teacher meeting, because I was expecting we could have made a decision to help our work".

By using preventive I-messages, one can prevent conflicts by expressing one's future needs. For example, "this time, we will have tasks that may feel difficult at first. I hope you try those tasks even though you fail and ask for help when needed".

Positive I-messages offer a way to give positive feedback by describing one's positive feelings towards others. For example, "I was really proud of you when you helped your classmate. I was able to help others".

Confrontative I-messages are a recommended way of interacting when one encounters problems with other people's behaviour. They usually include three parts: describing another person's behaviour, the feeling this behaviour creates and the effect that behaviour has on the speaker. For example, a teacher could say "I'm frustrated when you are late, because it takes a lot of time to explain these instructions again".

Social awareness and relationship skills

Listening skills, according to [Gordon \(2003\)](#), consist of so-called passive and active listening techniques. Passive listening is non-verbal, such as nodding, signs and gestures and eye contact. Active listening, also called empathic listening, the speaker-listener technique, reflected listening or dialogic listening, is a way of showing unconditional acceptance and reflection of what is heard ([Weger, Bell, Minei, & Robinson, 2010](#)). By actively listening, the listener perceives and verbally reflects the speaker's emotions, needs or hopes. The goal of

active listening is to improve mutual understanding and to help the speaker to handle his/her problem better.

Gordon introduced so-called roadblocks, which include judging, praising or mocking during interaction with others, rather than using I-messages and active listening. Road blocks hinder open communication and are therefore not recommended ([Gordon, 2003](#), p. 136).

Responsible decision-making

The no-lose conflict resolution method is the most central method used in conflicts between people ([Gordon, 2003](#); [Davidson & Wood, 2004](#)). In this method, the problem is defined in terms of the conflicting needs, and the solution for the conflict is searched for in collaboration. This method can be used both in two-way conflicts and with a conflict involving a larger number of people. It is also applicable in cases of conflicts between debaters' values.

Context: SEL course in Finnish physical education teacher education

The study was conducted at the University of Jyväskylä in Central Finland in a course that has been an obligatory part of the PE programme since 2001 ([Klemola, 2009](#)). The course is part of PE students' pedagogical study in the Department of Teacher Education. The pedagogical studies consist of 60 credits (300 credits altogether in a master's degree). In the Department of Teacher Education, there are three courses that cover the contents of SEL, altogether nine credits ([University of Jyväskylä Teacher Education Curriculum, 2019–2020](#)). This particular course is the first SEL course during the studies and it takes place during students' first semester.

Annually, around 60 first-year students (divided into three small groups) participate in this 20-hour social and emotional skills course (two credits) based on Gordon's interaction model and SEL concepts ([Klemola, 2009](#); [Tynjälä et al., 2016](#); see also [Lintunen & Gould, 2014](#)). The goals of the course curriculum were to better understand oneself, to learn different socioemotional and problem-solving skills and to apply the skills in one's own life as well as in the school context. An informal course goal was to support the safe atmosphere of the study groups, as the course took place in the early months of students' university lives.

There were five four-hour sessions in the course. The course consisted of practising socioemotional skills such as listening, clear self-expression and conflict resolution. The contents and teaching methods of the course were like Gordon’s teacher effectiveness training (TET) ([Talvio, Lonka, Komulainen, Kuusela, & Lintunen, 2013](#); Table 9.1). The teaching methods were based on learning-by-doing instructional strategies ([Kolb, 1984](#)) with an emphasis on active learning and conversations. Students were given homework in between the sessions, and at the end of the course, a larger course assignment was given to help apply the theory and deepen learning. Homework consisted of practising certain skills learned (for example, “Ask someone ‘how are you?’ and focus on using all the listening skills you have learned. Reflect on what happens” or “Prepare a positive I-message for someone close to you. Say it aloud to him/her. Reflect on what happens and how you feel”.) or assigned reading about openness and I-messages.

Table 9.1. Description of the SEL course sessions

Sessions (4 hours each)	Content
1.	SEL skills definition Behaviour window of the Gordon model Describing others’ behaviour without adding interpretations
2.	Identifying and naming emotions Open communication: I-messages
3.	Listening skills Confrontation I-messages
4.	Different kinds of conflicts Win-win method
5.	Value conflict resolution How do I improve my SEL skills in future?

Aim of the study and research questions

The purpose of this previously unpublished paper was to explore PE learning and SEL skills during the SEL course, and the meaningful learning experiences students experience in the course.

The following research questions guided our work:

RQ1: What skills do PE student teachers learn in the SEL course?

RQ2: What kinds of learning experiences are meaningful for PE student teachers during the SEL course?

Apart from describing the general learning outcomes, we aimed to better understand features of learning that were experienced as meaningful and why in the SEL course. Our interest was in identifying the kinds of learning experiences in the SEL course that provide PE student teachers with a special value, and how the described meaningful learning experiences become visible in students' lives. We therefore used a qualitative approach ([Braun & Clarke, 2006](#); Krippendorff, 2013; [Miles & Huberman, 1994](#)) to examine the different ways of perceiving the personally meaningful learning experiences in a PE student teacher course that promotes social and emotional skills.

Data and analysis

The data consists of two different sets, the pre- and the post-test data and learning diaries. Responses from the knowledge test and the dealing with challenging interactions (DCI) instrument by [Talvio \(2014\)](#) were collected both before and after the course. In the knowledge test, students had to define the central concepts of Gordon's model, such as active listening. In the DCI instrument, there were descriptions of different interaction situations and students were asked to write what they would do and say in those situations. Learning diaries were collected two weeks after the course. The instruction for the learning diaries was to reflect on one or two of the most meaningful learning experiences and describe how the learning had affected their interaction in their lives. Students were also asked to use literature to help their reflection. The learning diaries (N = 48) consisted of 131 pages and were

analysed using qualitative content analysis ([Braun & Clarke, 2006](#); Krippendorff, 2013). This qualitative data was analysed in three phases (Table 9.2).

To address RQ1, the skills identified by students were categorised and analysed (Table 9.2, phase 1). This first phase of analysis revealed the most common skills as listening skills (41), I-messages (31), perceptions versus interpretations (11), the no-lose method (7) and value conflicts (5).

The listening skills and I-messages with the most mentions in learning diaries were chosen for further analysis with the help of the pre- and post-tests. Questions in the pre- and post-tests (N = 54 and N = 45 respectively) that involved listening skills and I-messages were selected (knowledge test questions 1, 2, 3 and 7; DCI-instrument questions 9, 10, 12 and 13). There were questions that measured knowledge and the skills of listening, positive feedback and confrontation I-messages. The tests were analysed to determine answers typical for each question and to assess the overall trends. As an example, students could not define active listening before the course, but after the course, almost all the students were able to describe active learning. In the DCI test in which they were expected to apply SEL skills, students used a lot of roadblocks, such as praising or blaming, both in listening and I-messages before the course. However, based on the post-test, there was a lot more naming of emotions, especially in I-messages, and much fewer roadblocks were used. Further, students' interpretations of others' behaviours decreased by the end of the course.

To address RQ2, the learning diaries were analysed using content analysis in Phases 2 and 3 (Table 9.2). In Phase 2 (searching and revealing themes), students' expressions of their learning that affected their thoughts and actions were analysed. These categories were understanding the importance of the topic, self-awareness and awareness of social situations, change in one's behaviour and relationships, challenges and doubts about skills learned in the course.

In analysis Phase 3 (defining and naming themes), two core outcomes of students' learning were created. Those were curious and positive attitudes, and decisive changes in thinking and acting.

These findings are presented in more detail later in this text: in chapters Skills students learned in the SEL course (RQ1) and Meaningful learning experiences (RQ 2): expressions of learning (Phase 2) and core meanings for the learning (Phase 3).

Table 9.2 The phases of data analysis of the learning diaries

RQ1	RQ2	
Phase 1	Phase 2	Phase 3
Creating initial codes: skills mentioned in diaries	Searching and revealing themes: expressions of learning	Defining and naming themes: core meanings for the learning
I-messages [further analysis with pre- and post-test]	Understanding the importance of the topic Awareness: self-awareness and awareness of social situations Change in one's behaviour and relationships Challenges and doubts about skills learned in the course	Curious and positive attitude Decisive change in thinking and acting
Listening skills [further analysis with pre- and post-test]		
Perception /interpretation		
No-lose method		
Value collisions		

Results

The results are presented according to the skills mentioned in the learning diaries and the pre- and post-tests (RQ1), and expressions of learning and core meanings of the learning (RQ 2).

Skills students learn in the SEL course

Listening skills and I-messages were mentioned most in learning diaries, although many students found it difficult to choose only one skill as the one most learned. Based on pre- and post-tests, improvement happened during the course. Both their ability to explain skills and core concepts of the course and their ability to apply skills in interaction situations improved. However, for a few students, there were also some limitations in describing interaction.

Students also had difficulty selecting one or two skills they found to impart the most meaningful experiences. This may explain why a few students described more skills with no deepened discussion on a particular skill.

I found it difficult to think only about my most meaningful learning experiences, as in each lesson I learned something new about myself and different ways of acting in interaction situations. (31)

Most students wrote that their most learned skills were I-messaging and listening. There were also mentions of problem-solving skills and the no-lose method of conflict resolution. Questions about listening skills and I-messages were scanned from pre- and post-tests ([Talvio, 2014](#)).

In the pre-test, students were able to answer most specifically Question 1 (How would you show a speaker that you were really listening to him/her?). There were some I-messages and active listening visible in their responses. However, most students were not able to explain active listening, and there were many responses of “I don’t know”. Further, describing their actions and lines in the DCI part of the test seemed to be difficult for many students.

Table 9.3 shows examples of some of the changes in the answers between the pre- and post-tests. In the knowledge part of the post-test, the biggest improvement occurred in explaining active listening and describing situations where one should “switch into listening”. Descriptions became more accurate and specific. In the DCI instrument part, where students

needed to explain how they would react and what they would say in certain situations (Questions 9, 10, 12 and 13), most of the students were able to more exactly describe active listening, positive I-messages or confrontative I-messages. Students used fewer roadblocks and interpretations of others' behaviours. With positive I-messages, students' naming of the reasons and effects behind the feedback increased. They named their emotions more and used more concrete descriptions of others' behaviours. More acts of listening and fewer uses of roadblocks were observed in the task where they needed to respond to another student's worries about an upcoming exam.

However, there were also many responses similar to those offered on the pre-test. This is in contrast to the diary entries, in which all students wrote that they learned the SEL skills during the course. The most difficult part of sending I-messages seemed to be naming emotions and describing others' behaviours without interpretations or blamings. In active listening, naming others' emotions seemed to be challenging. Thus, based on the results of the tests, there were some polarisations: skills that most students improved the most were also the biggest challenges for some students.

Table 9.3 Typical answers in pre- and post-tests (DCI Instrument)

A skill tested	Typical written response in pre-test	Typical written response in post-test
<p>Positive I-message</p> <p>“One of your teaching groups is different from the other groups. This group is always on time, they have done their homework and they actively take part in the lesson. The marks for this group are better than average”.</p>	<p><i>“You’re doing really well, keep doing what you’re doing, and we’re going to do something fun next week”.</i></p>	<p><i>“I have noticed that you have been there in time for classes and have been actively involved in the discussion in the classes. That’s why it’s been really easy and nice for me to teach you, and I’ve become really happy about it”.</i></p>

<p>Confrontative I-message</p> <p>“One of your students is always text messaging. The school has a rule that mobile phones may not be used at school”.</p>	<p><i>“I would urge the student to put his phone away and give reasons why it is not desirable to use the phone in the lesson. After all, it is thought of what is best for the students, and using the phone interferes with their own learning as well as that of other students”.</i></p>	<p><i>“I feel annoyed because I have to interfere with your cell phone usage. I have to interfere with it because it’s my duty. It makes me lose focus and I don’t think I can teach in the best possible way”.</i></p>
<p>Active listening</p> <p>“One of your students is coming to you after a lesson to ask you if the upcoming test will be difficult”.</p>	<p><i>“I’d say when you try your best, it’s going to be good, it’s unnecessary to worry about things in advance. When you do your best, that’s enough”.</i></p>	<p><i>“I’d ask what’s so worrying in the exam. I’d ask him openly to tell how he feels. I’d listen more than trying to speak”.</i></p>

Meaningful learning experiences

Expressions of learning

As presented in Table 9.2 (Phase 2) students expressed their meaningful learning experiences at different levels. During the course, learning led them to 1) realise the importance of the course topic for their life and future work, 2) increase their self and social awareness, 3) have a change in their behaviour and relationships and 4) have doubts and challenges in applying the skills in their interactions.

In most diaries, students described that **the importance of SEL** in relation to their lives and future professions was increased or strengthened. Many of the students were even surprised about how much they had learned. Some students indicated that there were a lot of new things they had not thought about earlier. They had not realised how much there was to learn in SEL. However, some students wrote that although they were familiar with the topics in the course, they learned concepts for handling familiar situations and have become more aware of the use of the different skills in their everyday lives. Students wrote that the course

was a meaningful part of their studies during their first year, despite the fact that they might not have been enthusiastic about the course prior to taking it. Many of the students wrote that their expectations turned much more positive during the course, and they realised the importance of SEL.

Perhaps at first, I had similar (social and emotional skills being women's stuff) thoughts mainly because I had never thought about the meaning of these skills any deeper. . . . I find this interesting because, at least during the course, my opinion and understanding of these skills changed enormously. (34)

The SEL course was overwhelmingly my favourite course during the first autumn semester of my studies. Although these things are not my strengths, I feel that I've improved and become incredibly interested in the subject. (48)

Analysis of meaningful learning experiences in SEL skills in the second phase revealed that many students indicated that their **awareness** increased. They wrote about how their self-awareness had increased, and many declared they had started paying attention to their own and others' behaviours in different situations. Many students critically reflected on their own behaviour. Remarkably, many students felt surprised, for example, about noticing that they were not as good at listening as they had earlier thought. Further, they have started to consider their earlier school and life experiences through "different glasses".

Awareness is perhaps the right word to describe the biggest result of the course. During the course, I've found suitable, good examples of different situations that we have gone through in lessons, in my own school history and substitute experiences. I've been thinking about my own behaviour and that of others a lot more actively than I've been earlier. (15)

However, I have begun to question this behavioural pattern of mine and wondered where it derives from in my case... Before the course, I believed that I was a good listener, but as the course progressed, I noticed several targets for development. (14)

Many students had been able to **change their own behaviour** during the course and gained significant and concrete learning in certain skills, such as listening and I-messages.

Students described how their change of behaviour had positively affected their relationships with their friends, parents or spouses. In particular, homework in which students needed to practise using positive I-messages or active-listening skills with their close relatives helped them to concretely act differently.

I noticed a development in my own listening skills in every aspect of listening. I feel that better listening has had a positive effect on my social relationships. (39)

Beyond the different levels of learning, a few **doubts and challenges** were also described in the diaries. Some students felt that applying the skills learned to their everyday life was really difficult. They described how active listening seemed reasonable when practising during course lessons, but was rather challenging to apply in real situations. Some doubts about how those skills would work in real situations were also mentioned. For example, the practicality of confrontative I-messages in challenging interaction situations awoke questions.

Sometimes during the lessons, I felt that all problematic behaviour should be faced by going nicely along with the other person's opinions through I-messages. Forming it (I-message) seemed challenging and even strange at first. This was because I was not used to communicating in that way. (2)

Personally, I feel that confrontative I-messages may work with primary school children, but I do not see that they would work with upper secondary school-aged pupils. Of course, you would like things to be resolved with something as simple as I-messages, but I just don't see it working in a real situation. (46)

Core meanings for the learning in the SEL course

Overall, the results showed two main categories of meaningful learning experiences (Table 9.2: Phase 3). On the one hand, the course caused a **positive and curious attitude** towards SEL. The positive and curious attitude is expressed in terms of increasing motivation to improve oneself and learn more, even when learning and changing behaviours are not easy. Attitude appeared to be a consequence of realising the importance of the topic, increasing

awareness and learning. Most students expressed intentions to study more and were enthusiastic about practising these skills later in their practicums.

A flaming curiosity and a burning desire to understand and learn more and more about these knowledge and skills in the future have arisen inside me. (7)

However, the most important thing is that my own attitudes changed because that is what the development of social and emotional skills and competences is all about. (9)

However, along with the course, I have already learned to tell a little bit about my feelings to other people, and not just to keep them inside me. I want to learn to be even better at this! (20)

On the other hand, many of the learning experiences can be defined as **decisive changes in thinking and acting**. Through these experiences, students reported that their way of interaction had already changed. These expressions of learning described a very concrete and even revolutionary change in students' attitudes, which was also reflected in their actions that improved and changed their interactions. Some students have already started to study this content independently, and others felt their relationships with their spouses, parents or close friends had become closer.

My relationship with my best friend deepened, and I feel that listening may cause a wonderful feeling about what the meaning of life is. By listening to people, you can help, love, care, and be safe, and in the meantime learn something be yourself. (49)

I have never before during my study history experienced that many sudden insights and meaningful learning experiences than during this course. I borrowed two recommended books from the library for this learning diary. Suddenly, I realised I've read a 300-page book over one evening even though I just was meant to skim it. (7)

Besides learning these skills, decisive change was visible in the ways students wrote about the meaningfulness of the course. A few students wrote about how the course had strengthened their career choice and how they had experienced strong change in their lives.

They found that learning SEL brought totally new points of view to their lives, relationships and teacherhood.

I have perceived a confirmation that I really want to become a teacher. During the course I've understood that social and emotional skills are not only some people's talents, but they are skills that can be developed the same way as ball handling skills. (16)

During and after the course, the certainty of my educational choice became brighter, and my desire to coach or teach children and young people became even stronger. I perceived a totally new point of view as why I want to become a teacher... Every human being should have an opportunity to take part in a social and emotional skill course because it changes one's life. (49)

Conclusion

The study at hand clearly indicates that the students who participated feel that they learned social and emotional skills and gained meaningful learning experiences in a SEL course in the context of teacher education. Based on their learning diaries, they reported improvement, especially in listening skills and in the use of I-messages in social interaction situations. Further, some other skills, such as the no-lose method of conflict resolution, were mentioned. Based on the pre- and post-tests, students' knowledge and application of the skills improved.

These results of skills learned are similar to those reported by [Talvio et al. \(2013\)](#), who studied teachers in an SEL course. Also, [McNaughton et al. \(2007\)](#) found that student teachers' confidence in their listening skills increased with an SEL course. Learning particular skills was also visible in students' learning diaries where they described their meaningful learning experiences.

Students' expressions of their meaningful learning during the course include the following: understanding the importance of the topic, increases in self and social awareness and changes in one's own behaviour and relationships. Lastly, the core meanings of their learning outcomes seemed to be showing positive and curious attitudes towards SEL skills and also decisive changes in their thinking and acting, resulting in better support of their social relationships.

Changes in the student teachers' self and social awareness were reported in the learning diaries. [Jones et al. \(2013\)](#) have underlined the meaning of both the ability to have self-awareness and "understanding what is happening" (social awareness). Students received more realistic self-awareness, similar to what the teachers reported in the study of Dolev & Leshem (2017). For example, at the beginning of the course, the student teachers found themselves to be good listeners, but during the course they realised how much more they could develop. [Jennings and Greenberg \(2009\)](#) highlight that socially and emotionally competent teachers have high self and social awareness. They recognise their own emotions, emotional patterns and tendencies. They also understood their strengths and weaknesses.

As a sign of social awareness, PE student teachers in this study started to pay attention to social interaction, and they started to recognise the usage of skills learned in this course. Many students wrote how they have found new perspectives to interpret their earlier experiences in schools. It seems they better understood pupils' behaviour. This understanding helps to create a positive insight into different pupils, which may improve teacher-student relationships ([Spilt & Koomen, 2009](#)). Different ways of enhancing teachers' skills in encountering students in emotionally supportive ways have been suggested, and positive attitudes towards all different students that could reduce non-supportive classroom experiences are emphasised ([Kiuru et al., 2015](#)).

However, some students also described challenges in practising and applying skills in their everyday lives, and not all the students improved in the skills studied during the course. In the post-test, there were still signs that applying listening and I-messaging skills was difficult. Also, some of the student teachers had difficulties imagining how to apply the skills learned in school, but only a few of them reported doubts about the usefulness of these skills. Naturally, student teachers in our study were just at the beginning of their teaching paths. Previous research shows that the transfer of the learning is problematic and it is very typical that professional knowledge learned in teaching situations is often not used in similar contexts outside of teaching situations (see e.g., [Alexander & Murphy, 1999](#); [McKeough, Lupart, & Marini, 2013](#)). However, [Klemola, Heikinaro-Johansson and O'Sullivan \(2013\)](#) found that physical education student teachers were also able to apply social and emotional skills learned in an SEL course in their teaching practice, and many of them felt they succeeded in implementing the new skills in real-life experiences. [Garner et al. \(2018\)](#) in turn saw the most improvement among student teachers who already had some teaching experience. In this research, it seemed that the biggest improvement occurred in students'

close relationships, as they did not have any school practice going on during the study. To sum this up, turning ‘knowing what’ into ‘knowing how’ takes time, and this kind of short course alone may not be enough to develop sufficient competence for working life.

After all, it seems that during this SEL course, there were remarkable changes in students’ attitudes. Some students even mentioned that they have started a new era in thinking and using social and emotional skills. We believe that teacher education should support this kind of attitude and mode of learning. As [Su \(2011, p. 407\)](#) says, higher education should aim for being mode of learning. He claims that being mode is the deepest way of learning and an important part of lifelong learning: “The more feelings a student has for the curricular subject, the more he or she will remain engaged; the learning and thought will be deep and lasting, and the capacity for ‘being’ will be enhanced over time” (Su 2011, p.407). According to the results of this study, it is possible that a short university course like this SEL course may be a start for much bigger and longer-lasting experiences in the student teachers’ learning and lives.

To achieve these kinds of changing attitudes, understanding PE students’ experiences of meaningful learning with respect to SEL in teacher education is central to developing emotionally, relationally and morally sound pedagogical practices (see [Kostiainen et al., 2018](#)). Studies concerning the effectiveness of different SEL interventions in schools have found that it is important to create a safe, caring and involving atmosphere ([Schonert-Reichl, 2017](#); [Durlak et al., 2011](#)). Although in this study we did not address the pedagogical practices of the SEL course we studied, the meaning of the atmosphere, teaching methods and the teacher were underlined in many diaries, consistent with Stipp’s results (2019). It seems to be important that a teacher of SEL courses has the knowhow of both the content and pedagogy to effectively teach social and emotional skills ([Kostiainen et al., 2018](#)). [Tynjälä et al. \(2016\)](#) have stressed the usefulness of versatile delivery methods in teaching working life skills, such as socioemotional skills.

[Fink \(2013, p. 7\)](#) describes that significant learning in higher education teaching should result in an experience that others can observe and say: “That learning experience resulted in something that is truly significant in terms of the students’ lives”. Students’ descriptions in this study prompt us to conclude that an SEL course based on Gordon’s model resulted in significant meanings in their lives and perhaps in their growth to become a teacher. This might explain the annual positive feedback about this SEL course, which has been consistent

and plays a respected role in the curriculum of the PE teacher education programme in Finland.

Recommendations

To enhance schools' and teachers' SEL competencies, teacher education should improve its practices by offering students a deeper understanding of SEL and by enhancing students' motivation to improve themselves, given that it takes time to learn these skills beyond course completion.

First, according to our findings, a single course may “open” students' eyes and guide them in developing their pedagogical thinking during their studies. [Talvio and Lonka \(2019\)](#) point out that teachers need time to adopt studied SEL skills in their practices, as their pedagogical thinking and ways of working have developed during their earlier experiences and studies. [Jones et al. \(2013\)](#) suggest that creating a culture of continuous improvement and learning is vital. Creating such an atmosphere in teacher education many require developing these skills at as early a stage as possible. There should be long-term practices in SEL in teacher education and in teaching practices that foster learning in other courses ([Klemola, 2009](#); [Tynjälä et al., 2016](#); [Dolev & Leshem, 2017](#)). [Garner et al. \(2018\)](#) encourage SEL training for all pre-service teachers.

Secondly, Gordon ([2003](#)) already developed his model in the 1970s and it still seems to work as a useful tool to develop SEL skills in teacher education.

Limitation of this study and future directions

In data collection, the instruction of the course diaries led student teachers to describe their most meaningful experiences. This obviously brought up powerful experiences and may explain why there were limited mentions of challenges and doubts in their narratives. However, such significant enthusiasm during a short course may decrease beyond course completion.

The analysis of the pre- and post-tests was superficial, and an internal comparison of individual students' pre- and post-test responses would have been interesting. Including

students' background information such as teaching experience more specifically could have deepened the understanding of the meaningful experiences.

More research is needed on frameworks and models that produce meaningful learning in SEL during teacher education and to understand the long-term benefits of learning SEL skills (see e.g., [Talvio et al., 2014](#); [Schonert-Reichl, 2019](#)). Some student teachers in this study have continued to develop their social and emotional skills beyond the course, which shows that some meaningful learning has started. It would be interesting to study their reasons for interest and how continuous awareness of SEL skills affects their teaching beyond graduation. Additionally, it would be important to further study university courses that create meaningful learning experiences in general.

This year, this course was implemented online using the Zoom application. Studying how this method works could be interesting as well.

Note from the author

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