ORIGINAL ARTICLE

The Curriculum Journal ⬛BERA

The emotional landscape of curriculum making

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Abstract

Our aim with this study was to gain a better understanding of the emotional landscape of curriculum making by exploring the variety of emotions embedded in shared sense-making about the national curriculum reform implementation at the district level. Focus group interview data were collected from 12 curriculum reform steering groups around Finland, that were responsible for orchestrating curriculum reform work at the district level. The data were qualitatively content analysed. The results showed that the local steering group members experienced a wide range of emotions in shared sense-making. Positive emotions were described slightly more often than negative emotions. The emotional landscape of the sense-making strategies applied in curriculum reform work varied depending on the strategy applied.

KEYWORDS
curriculum reform, emotion, shared sense-making

INTRODUCTION

It has been suggested that educational stakeholders' engagement in shared sense-making about the curriculum is the key for a successful curriculum reform because it determines how the reform aims are translated into school-level practices (Gawlik, 2015; Kondakci et al., 2017; Weick et al., 2005). Making sense of the reform's aims is not easy. It often

calls for one to question one's own beliefs, knowledge, and practices (see van Veen & Sleegers, 2009). This can provoke both positive and negative emotions regarding the reform (Ittner et al., 2019; Saunders, 2013; van Veen & Sleegers, 2009), further resulting in either engagement or disengagement from the reform work. It has been shown that reform stakeholders' emotions regarding the reform are related to stakeholders' willingness to engage in the implementation of it (Ittner et al., 2019; Spillane et al., 2002). This further influences on the reform impact. Therefore, we presume that emotions are an important ingredient of shared sense-making over the reform, contributing to the commitment of those in charge of orchestrating the curriculum making, and hence further to impacting the reform.

Most studies on emotions in school reforms have focused on teachers' and principals' emotions regarding reform implementation (Lackey & Huxhold, 2016; Lee et al., 2013; Saunders, 2013; van Veen et al., 2005). Therefore, we know surprisingly little about the emotions of those in charge of organising curriculum reform work at the school district level. In this study, we aim to fill the gap in the literature by exploring the emotions that are experienced by those having the central intermediary role in the reform in shared sense-making in a large-scale curriculum reform. Also, variation in emotions that are experienced in terms of various sense-making strategies applied will be explored.

The Finnish national core curriculum

In Finland, the national core curriculum provides a framework for school practice. The core curriculum, in which the mission, objectives, and core content of basic education are defined, is updated about every ten years. At the national level, the Finnish Agency for Education (EDUFI) is responsible for coordinating and reforming the core curriculum. Core curriculum provides a foundation for reforming the curricula at the district-level (Vitikka et al., 2012). The educational providers, typically the municipalities, are responsible for constructing the local curriculum based on the national core curriculum.

The most recent national core curriculum reform was completed in December 2014, and the local curricula were completed and accepted by August 2016, after which the phased implementation began. In Finland municipalities are rather autonomous actors responsible of offering basic education. In the curriculum reform the municipalities had freedom to decide how they organise the local level curriculum making. Most of the municipalities collaborated with neighbouring cities and towns, and even when they ended up writing the actual curriculum document in municipality level the local curriculum making happened in regional or district level. Work was orchestrated by the steering groups that were nominated for this task and consisted of municipal actors, such as chief education officers from the participating municipalities. Groups also included educational practitioners from the schools in the district. The task of these groups was to promote learning, communication, and collaboration in and between the schools, and organise the curriculum work in the school districts. Thus, the district-level stakeholders played a central, intermediary role in interpreting, integrating, and transforming the national core curriculum into local curriculum that emphasises the aims, contents, and values from a local perspective (Pyhältö et al., 2018). In practice, the steering groups ensured that written curricula at the district-level were based on the national core curriculum. As the districts had autonomy regarding the ways the reform should be organised, the forms of collaboration ranging from groups involving representatives from several municipalities (especially in the areas including small neighbouring municipalities) to the groups carrying out the reform work within the municipality or in one city. Compared to the previous curriculum reforms in Finland, the schools were engaged in the process of constructing the district-level curriculum and did not write school-based curricula (Mølstad & Hansén, 2013).

Shared sense-making about the reform process

In curriculum reform, shared sense-making entails building a shared understanding of the meaning and significance of the reform and its implications for schools through dialogue and negotiations (Evans, 2007; Gawlik, 2015; März & Kelchtermans, 2013; Weick et al., 2005). This has suggested as the key for sustainable school development, and a pre-condition for reform to take root. In shared sense-making, the reform stakeholders interpret the aims of the curriculum in the light of their pre-existing knowledge, understanding, practices, and beliefs (Coburn, 2005; Evans, 2007; Ketelaar et al., 2012), finally translating and transforming them into school practices. It has been suggested that a shared understanding about *what* should be changed according to the new curriculum, and *how* the change should be brought about need to be built by reform stakeholders (Salonen-Hakomäki, 2016; Fullan, 2007; Timperley & Parr, 2005). In this study, we focus on the latter, i.e., shared sense-making about the orchestration of the reform by those responsible for leading it at the districts.

When making sense of the orchestration of the curriculum reform, the local reform leaders strive to build a sufficiently shared understanding about what actions are needed for the curriculum reform to be successfully implemented in their school districts (Pyhältö, 2018). We previously identified several hands-on sense-making strategies that those in charge of curriculum reform applied including (a) *integrating the curriculum process into local development*, (b) *prioritising and focusing*, (c) *bidirectional resilience*, (d) *engaging educational practitioners in learning*, and (e) *capacity building* (Soini et al., 2018). *Integrating the curriculum process into local development work* refers to reforming stakeholders' efforts to connect the curriculum reform process to school level development initiatives and/or school legislation reforms that are being implemented at the same time. *Prioritising and focusing* involves analysing and outlining the reform process according to the timetable and aims of the reform set at the district-level by the state-level administration. *Bidirectional resilience*, on the other hand, entailed anticipating the sensitive phases of the reform process at the district-level and returning to the phases they estimate will be crucial for facilitating the district-level reform process. *Engaging educational practitioners in learning* refers to efforts to build participative forums and forms of collaboration for teachers with the aim of conveying the knowledge adopted in the steering groups into resources for learning at the school level, and further, for developing transformative practices guided by the new curriculum in the school communities. C*apacity building* comprises striving to identify social resources and expertise to promote the functional and collaborative development work at the local level.

However, using such strategies in building a shared understanding of how the reform should be implemented is not easy, and does not automatically result in functional or novel understanding, and development of related practices (Soini et al., 2018; Gawlik, 2015). Making sense of the reform also often requires questioning one's own beliefs, practices, and knowledge (e.g., Spillane et al., 2002), which is a challenging task that is filled with uncertainties. In fact, previous studies have shown that curriculum reforms typically increase workload, demand new competencies, and raise feelings of vulnerability and insecurity (e.g., Bahia et al., 2013; Chen, 2016; Lackey & Huxhold, 2016; Lasky, 2005). Accordingly, it is reasonable to assume that sense-making about the orchestration of the reform at the local level is an emotional experience for those involved, and that the quality and the quantity of such experience is likely to influence on their commitment on the reform, and the type of strategies applied and preferred in the reform work.

The role of emotions in educational reforms

Emotions refer to intense and short-lived active states that are bound to specific eliciting stimuli (Do & Schallert, 2004; Ekman, 1992; Schutz et al., 2006). They can be categorised based on their valence, i.e., their positive or negative charge (e.g., Pekrun et al., 2002). Positive emotions such as enthusiasm, satisfaction and relief typically engage us in the activities which trigger them, while negative emotions such as anxiety, frustration and disappointment make us to avoid them. Emotions are most often triggered by social situations (e.g., Averill, 1982; Kemper, 1978; Oatley & Johnson-Laird, 1987). Accordingly, social processes, such as shared sense-making, shape and are shaped by emotions (e.g., Leary, 2000; Oatley, 2000; Parkinson et al., 2005; Zembylas et al., 2011).

The previous research has almost exclusively focused on the teachers' emotions in the implementation of the new reforms in the classroom (Hargreaves, 2005; Scott & Sutton, 2009; Sutton & Wheatley, 2003). It has been shown that top-down mandated reforms are likely to evoke negative emotions in educational practitioners in charge of the reform implementation (Borko et al., 2002; Clement, 2014; Lee & Yin, 2011). For example, teachers have been shown to experience a variety of negative emotions such as anger, disappointment, insecurity, frustration, confusion, and anxiety when implementing such reforms (Bahia et al., 2013; Borko et al., 2002; Chen, 2016; Jeffrey & Woods, 1996; Lasky, 2005; Saunders, 2013; van Veen et al., 2005; van Veen & Sleegers, 2009). It has been shown that negative emotions rise especially when teachers perceive the objectives of the reform to be inconsistent or contradictory with their own beliefs and goals (März & Kelchtermans, 2013; Schmidt & Datnow, 2005; van Veen & Sleegers, 2009). In turn, it has been found that positive emotions among teachers, such as hope, enjoyment, reinforcement, joy, contentment, satisfaction, and enthusiasm in the school reforms are provoked by the reform process (Ittner et al., 2019; Lackey & Huxhold, 2016; Saunders, 2013; Van Veen & Sleegers, 2009). For example, teachers have been shown to experience enthusiasm while entering the reform process, joy, contentment, and satisfaction when the reform have helped them to develop their skills or when the reform is in line with their own teaching beliefs, and hope about the success of the reform (Lackey & Huxhold, 2016; Schmidt & Datnow, 2005; Van Veen & Sleegers, 2009).

Prior studies on emotions in school reforms imply that emotions play an important part in educational reforms, making or breaking the implementation of the new curriculum (Borko et al., 2002; Hargreaves, 2005; Ittner et al., 2019). It has been shown that the negative emotions tend to inhibit educational practitioners' effort and willingness to adopt and implement the new reform (Borko et al., 2002), while positive emotions are related to being more open towards the implementation of reform (Ittner et al., 2019). Positive emotions have also been shown to foster the availability of personal resources and thus work as catalysts for innovation and creativity (Fredrickson, 1998). Accordingly, we presume that the district-level stakeholders' emotions play a crucial role in the extent to which they engage in sense-making, which further influences the school level reform implementation. At its best, the positive emotions raised by shared sense-making about the reform implementation increase the district-level reform leaders' engagement with the reform, while the negative emotions raised by the shared sense-making could decrease their willingness to invest in the sense-making. Negative emotions are not merely problematic but can trigger motivation for achieving common goals and increasing their efforts to achieve the shared goal (Tamir, 2009). Still, they are likely to be harmful for reform implementation overall, especially if positive emotions are rarely experienced (Ittner et al., 2019; Pekrun, 2006). We can expect that being involved in shared sense-making not only fosters positive emotions such as feelings of reinforcement and enthusiasm, but also potentially to process and regulate the negative emotions better (see Ittner et al., 2019; Van Veen & Sleegers, 2009).

To conclude, the emotions that district-level stakeholders experience in shared sense-making can be expected to influence their willingness to engage in the reform, which further influences the reform's success. To promote meaningful school-level impact of the reform, the emotions that the district-level stakeholders experience in the shared sense-making need to be understood. However, we do not know what emotions the reform stakeholders having an intermediary role in orchestrating the local curriculum reform experience in shared sense-making and whether the varied hands-on strategies of shared sense-making evoke different emotions.

AIM OF THE STUDY

Our aim with this study is to map the emotional landscape of curriculum making by exploring the variety of emotions embedded in shared sense-making about the national curriculum reform implementation at the district-level. We examined the emotions related to shared sense-making on how to implement the reform locally, as described by the local curriculum steering group members. The following research questions were addressed:

1. What emotions did local curriculum reform steering group members describe in relation to shared sense-making over curriculum reform implementation?
2. How were the emotions distributed across the various reform sense-making strategies?

METHODS

Participants

Focus group interview data were collected from 12 curriculum reform steering groups around Finland. The groups represented varied ways of orchestrating the local curriculum reform, ranging from collaboration between several neighbouring municipalities, to carrying out the reform work within the municipality. The sample of the local curriculum reform steering groups involved participants from 54 municipalities (17%, 54/320, of Finnish municipalities). The municipalities varied in size and in terms of their location (rural/urban). The sample represented several types of municipality in Finland and there were variations in the approach to carrying out the local curriculum process at the district-level. The size of the steering groups varied between 8–12 participants. The groups consisted of variety of education stakeholders, however, they always included chief education officers from participating municipalities, and principals, primary and secondary school teachers, special education teachers from the schools in the district. In some cases, also early childhood educators, youth workers, school psychologists and other participants regarded as essential in the particular context were included in the groups. Therefore, the sample was also sufficiently representative of the education stakeholders of the school districts.

Data collection

The focus group interviews were conducted during spring 2016. The steering groups followed the same timeline in their reform work as that set by EDUFI (the Finnish National Agency for Education). At the time of the data collection period, the groups were in the final stages of the local curriculum process, finalising the district-level written curriculum. A semi-structured theme interview protocol (Pietarinen et al., 2017; Pyhältö et al., 2018; Soini et al.,

2018) was pilot tested before data collection. It included questions about three main themes: (1) *large-scale curriculum reform and school development*; (2) *organisation and implementation of the local curriculum process*; and (3) *ownership and agency in terms of ongoing curriculum reform*. In the interviews, the steering group members were encouraged to reflect on their experiences of the orchestration of the curriculum reform at the district-level both retrospectively and prospectively. Two senior researchers conducted the interviews during the groups' meetings. All members of the steering groups were invited for a group interview and participation was voluntary. The participants were informed about the study and their rights as informants before the interviews. None of the steering group members declined to participate in the interviews. The interviews took between 60 and 90 min to complete. The interviews were tape-recorded digitally and transcribed into text files by a trained research assistant.

Analysis

The group interviews were qualitatively content analysed (Chamberlain, 2006; Elo & Kyngäs, 2007). The analysis consisted of two complementary analyses concerning: (1) identifying episodes involving the shared sense-making over core curriculum reform (Soini et al., 2018) and mapping the emotional landscape of the shared sense-making, following with (2) detecting the emotions distributed across the reform implementation strategies.

1. At first, all the text segments in which the local steering group members reflected and discussed means for implementing the local curriculum work were coded into the shared sense-making over curriculum implementation -category. This was followed by detecting emotions related to the shared sense-making. The criteria for identifying steering group members' emotions were that (1) participants had given an emotional label to the experience, (2) it had to be previously identified as an emotion in the emotion literature (3) it had to be either their own emotion, another steering group member's expressed emotion, or the group's shared emotion. The valence of the emotional experience was then coded into two categories resulting in two basic categories: (a) positive emotions, including s*atisfaction, enthusiasm, hope, trust* and *appreciation*, and (b) negative emotions, including *insecurity, disappointment, frustration, dissatisfaction* and *exhaustion*.
2. In the second phase, the various hands-on strategies employed in shared sense-making over curriculum implementation were coded into the five implementation strategies, namely *integrating the curriculum process into the local development work, prioritising and focusing, bidirectional resilience, engaging educational practitioners in learning*, and *capacity building*. After this, the distribution of emotions across the strategies was analysed.

To ensure the reliability of the coding of the emotions, two authors independently analysed 50% of the total responses using the analysis criteria created for this analysis. The level of disagreement between these researchers was minimal and was resolved through joint discussion. To ensure the reliability of the primary coding of the sense-making strategies, a disagreement analysis was conducted on the data by another senior researcher (Soini et al., 2018). The disagreement rate in terms of all categories was less than 3%, which showed that the developed criteria for identifying shared sense-making episodes were adequately specified. In the few cases of disagreement, consensus of final categorisation was reached in a discussion between researchers.

RESULTS

The results showed that the local curriculum reform steering group members described a range of emotions when making sense of how to implement the curriculum. They described positive emotions ($f = 178$) more often than negative ones ($f = 121$). When describing positive emotions regarding the shared sense-making, the local curriculum reform steering group members emphasised being satisfied, and enthusiastic about the reform (see Table 1), including descriptions of enthusiasm and satisfaction towards the process itself and the orchestration of the collaboration, both in the steering group as well as at the local school level. They also described experiences of hope, trust and appreciation, commonly related to the perceived success of the implementation of the reform. These emotions were more rarely reported. When describing negative emotions, the district-level reform leaders most typically referred to feeling insecure, disappointed, frustrated, and dissatisfied with the curriculum reform process. The steering group members were insecure about their own skills and abilities, how the implementation phase in the schools would turn out, and whether the reform would be successful. On the other hand, they showed frustration and disappointment about the structures and resources that they had been granted for the process as well as the co-operation at the local level. They also mentioned being exhausted by the reform process, but such experiences were rarely mentioned.

Further investigation showed that the sense-making strategies differed in how much they evoked emotions in local steering group members (see Table 2). The steering group members reported the highest number of emotions related to *bidirectional resilience* ($f = 86$) and in *engaging educational practitioners in learning* ($f = 83$). They also experienced a considerable number of emotions related to the *capacity building* strategy ($f = 63$). In turn, *integrating the curriculum process into local development work* ($f = 30$) and *prioritising and focusing* ($f = 37$) aroused significantly fewer emotions. The strategies also differed in terms of the distribution between negative and positive emotions. The emotions varied across the sense-making strategies, i.e., different emotions were described when the steering group members were engaged in various strategies.

Capacity building seemed to evoke positive emotions ($f = 30$) and negative emotions ($f = 33$) equally among local steering group members. The most common positive emotion they described when being engaged in building capacity for change in the districts was

TABLE 1   Local steering group members' emotions in shared sense-making

Emotion	*f*	%
Negative	**121**	**40**
Insecurity	40	13
Disappointment	30	10
Frustration	27	9
Dissatisfaction	20	7
Exhaustion	4	1
Positive	**178**	**60**
Satisfaction	108	36
Enthusiasm	34	11
Trust	17	6
Hope	16	5
Appreciation	3	1
Total	**299**	**100**

TABLE 2 The distribution of the local steering group members' emotions by the sense-making strategies

	Capacity building	Bidirectional resilience	Integrating the curriculum process into the local development work	Engaging educational practitioners in learning	Prioritising and focusing
Negative	**33**	**50**	**10**	**14**	**14**
Insecurity	5	22	3	6	4
Disappointment	13	9	1	3	4
Frustration	11	6	3	4	3
Dissatisfaction	4	11	3	1	4
Exhaustion	0	2	0	0	2
Positive	**30**	**36**	**20**	**69**	**23**
Satisfaction	20	22	14	37	15
Enthusiasm	4	6	3	18	3
Trust	3	2	1	8	3
Hope	2	6	2	4	2
Appreciation	1	–	–	2	–
Total	**63**	**86**	**30**	**83**	**37**

satisfaction, followed by enthusiasm. For example, steering group members typically described that they had been satisfied with the process as well as with the local co-operation at the district-level. They also described enthusiasm related to the group's own reform work and working spirit as well as the level of skills and expertise within the group. In turn, when describing negative emotions related to capacity building, they typically referred to being disappointed and frustrated with structures and resources, such as national level guidelines for curriculum reform. Both disappointment and frustration were most often described in relation to capacity building compared to other sense-making strategies.

> 'It was one of my greatest disappointments from national level, and when I was working one section at the national level, so, in the beginning, when EDUFI gave instructions, collaboration was emphasised. However, the collaboration meant the half hour time after the introduction lesson. The discussion across the disciplines ended at that level […] it shows in the work of EDUFI that they are afraid of giving clear instructions for the municipalities, but at the same time, individuals at the EDUFI give sharp directives – it complicates the municipal-level work […]'
>
> *(Disappointment, capacity building)*

Bidirectional resilience was the only sense-making strategy that evoked significantly more negative emotions ($f = 50$) than positive emotions ($f = 36$) among the steering group members. When describing positive emotions, they emphasised the feelings of satisfaction, enthusiasm, and hope. For example, they mentioned being satisfied with national and district-level structures and resources such as the core curriculum and timetables of the local curriculum reform work and with skills and attitudes of the group members. Most of the negative emotions they mentioned were insecurity, dissatisfaction, and disappointment. For example, they reported feelings of insecurity in relation to the sensitive phases that they estimated to be crucial in the reform process, such as assessment and subject groups. They also described negative emotions such as disappointment and frustration, related to structures and resources. The local steering group members described being both insecure

in whether they could write the reform clearly enough and how the schools were eventually going to implement the reform.

> 'It currently annoys and worries me that because we were not happy with how the subjects were shown in the digital core curriculum and how it would work as a tool for teachers, we had to make our own table […] It is probably a question here, how the everyday life of school is going to work in the spirit of the new curriculum.'
>
> (*Insecurity, bidirectional resilience*)

Integrating the curriculum process into the local development work evoked more positive ($f = 20$) than negative emotions ($f = 10$). Like all other strategies, being satisfied dominated the positive emotions in local steering group members' descriptions. They also emphasised feeling enthusiastic about the reform process. For example, the steering group members described being satisfied with the orchestration of collaboration within districts. The few negative emotions regarding integrating the curriculum process into the local development work were dissatisfaction, insecurity, and frustration.

> 'It has been said that money is best preserved between the curriculum, and it has been true with previous curricula, but maybe not anymore in the future and not with this curriculum. […] the new teachers, young teachers, are using the curriculum to support their teaching, and for them, it is the starting point for planning teaching – it has been nice to notice.'
>
> (*Satisfaction, integrating the curriculum process into the local development*)

When being involved in the *Engaging educational practitioners in learning* strategy, the local steering group members described considerably more positive emotions ($f = 69$) than negative emotions ($f = 14$). The most typical positive emotions described were satisfaction, enthusiasm and trust. For example, they mentioned being satisfied with the extensive collaboration with the school-level practitioners, such as principals and teachers. The most common negative emotions related to engaging educational practitioners in learning were disappointment and frustration. For example, they mentioned feeling disappointed with subject teachers' attitudes towards collaboration further leading to fragmentation in pupil's education. However, negative emotions related to this strategy were rarely mentioned.

> 'And now I am very happy because the schools were made to think about this for themselves. That is, at least in our school, this curriculum reform was a process of growth for the community and for me personally. I noticed that many things were structured through the implementation of the curriculum to the schools […]'
>
> (*Enthusiasm, engaging educational practitioners in learning*)

Prioritising and focusing evoked more positive emotions ($f = 23$) than negative emotions ($f = 14$). 'Satisfaction' was the most typical positive emotion related to engaging in the prioritising and focusing that the local steering group members described. Sometimes they also mentioned trust and enthusiasm. For example, they described feelings of trust towards the school level implementation of the reform. The most typical of the few negative emotions that were described were disappointment and insecurity. For example, they mentioned that they felt uncertain whether they had managed to distribute the aims of the curriculum correctly by year classes.

'Well, I am satisfied with the fact that we postponed the traditional subject-based curriculum work. That is what we discussed in the steering group, and even the leader of the group was initially oriented to start the work of subject groups, but instead we had a long transition period before we started them. I feel that it was a good decision, valuable decision, because we will be able to write the curriculum regarding the subject, but everything else – it needs more work'

(Satisfaction, prioritising and focusing)

DISCUSSION

Methodological reflections

The study used focus group interview data (Morgan, 1996). The method resulted in rich qualitative data (e.g., Chioncel et al., 2003; Krueger & Casey, 2015; Morgan, 1996) enabling an understanding of the emotions embedded in shared sense-making of the reform work carried out by the curriculum reform steering groups, along with different ways of orchestrating the curriculum process, at the school districts, during the reform work. In emotion research, the structure of interviews has been criticised as possibly influencing the results in situations in which participants deliberately hide their emotions or are unaware of them and their sources (Wosnitza & Volet, 2005). Hence, we did not ask the local steering group members about their emotional experiences but let them reflect freely on the whole curriculum process to bring their own voice to light and to promote the explanation of the emotions experienced in shared sense-making (e.g., Järvenoja & Järvelä, 2005). The focus group interviews were carried out at a late stage of the curriculum reform process, thus the retrospective approach of the interviews might have affected the results. For example, the interviews in the latter stages of the reform enabled the steering group members to reflect on their emotions during the whole process instead of the first impressions. On the other hand, it may be challenging to recall and summarise emotions in a single interview at the end of the reform process (e.g., Angelides, 2001; Cox & Hassard, 2007) and thus the emotions experienced at later stages might have been emphasised more than those felt at the beginning of the process. For example, the respondents might have described experiencing more satisfaction with the process and less insecurity about their work in reforming the district-level curriculum compared to the earlier stages of the reform process.

Due to the retrospective approach, the emotions participants recalled were inevitably reinterpreted emotions and these memory and reinterpretation effects may have influenced the data by generalising the experiences.

Using focus group-interviews might also have played a role. The discussion moderator in the interview ensured that the members of the steering groups covered each of the themes comprehensively, asked for clarification and triggered further discussion related to the theme under collective reflection. The dominance or passivity of some participants, and further, ending with the collective aspiration for unanimity while ignoring the information inconsistent with the dominant views of the group, was prevented by monitoring the members' participation in the discussion to capture the variety of the views in the shared sense-making process and the emotions they experienced (Chioncel et al., 2003; Krueger & Casey, 2015; Morgan, 1996). On the other hand, group interviews might impact positively the memory and reinterpretation effects as the participants can all fill into the experiences of others, but we might also question how easy it had been for the steering group members to share their emotions regarding the process.

The curriculum process is highly contextualised in the specific conditions of Finnish curriculum reform; therefore, the results are not applicable as such, but must be considered

in light of the contextual features. This study followed the ethical guidelines of the Finnish Advisory Board of Research Integrity (2012) for the responsible conduct of research.

Findings in the light of previous literature

The aim of this study was to explore the variety of emotions embedded in shared sense-making about the national curriculum reform implementation at the district-level. In addition, we aimed to find out whether various hands-on strategies of sense-making differed in terms of the local reform steering group members' emotions.

The results showed that the local steering group members experienced a wide range of emotions in shared sense-making. The positive emotions were slightly more common than negative ones. Hence, the results contradict previous studies that have indicated that reforms tend to evoke mostly negative emotions (Bahia et al., 2013; Borko et al., 2002; Chen, 2016; Jeffrey & Woods, 1996; Lasky, 2005; Saunders, 2013; van Veen et al., 2005; van Veen & Sleegers, 2009). A potential reason for the finding might be that we focused on local steering group members' emotions, who were responsible for orchestrating the reform work instead of teachers' emotions that has been focus of earlier studies. Local steering group members have a central intermediary role in the curriculum reform, as their responsibilities are in interpreting, integrating, and transforming the national core curriculum into a local curriculum (Pyhältö et al., 2018). This included modifying the curriculum according to the needs and features of the local context and deciding how to orchestrate the reform locally. Thus, they have wide opportunities to influence the ways of sense-making and furthermore might have chosen such ways to orchestrate the reform that they felt confident and familiar with, leading to predominance of positive emotions. This is inherent to the Finnish curriculum reform strategy that emphasise participation and educational practitioners' autonomy and expertise in school development. Yet, another potential reason for the finding is that the groups, in which the local steering group members worked, provided a source of support and helped to buffer and manage the negative emotional experiences as the experience was socially shared and collective (see Saunders, 2013).

The local steering group members' negative emotions ranged from insecurity and frustration to disappointment and dissatisfaction. Most typically, the negative emotions were related to structures and resources, such as time allocated for the reform work and instructions given by national level stakeholders. Studies on teachers' emotions in the reforms have identified similar negative emotions (Bahia et al., 2013; Borko et al., 2002; Chen, 2016; Jeffrey & Woods, 1996; Lasky, 2005; Saunders, 2013; van Veen et al., 2005; van Veen & Sleegers, 2009), implying that the range of negative emotions is quite consistent regardless of the local reform steering group members' role in the implementation. Still, local steering group members described more experiences of insecurity than the others. It might be that insecurity was emphasised because the reform implementation work was in its early stages at the local level and therefore, they might have been unsure how the reform will eventually be working locally in schools. The experiences of insecurity might also be intrinsic to their intermediating role in the curriculum reform work. The results showed that the local steering group members described similar positive emotions (e.g., enthusiasm, trust) that have also been reported by teachers and principals (Ittner et al., 2019; Lackey & Huxhold, 2016; Saunders, 2013; Van Veen & Sleegers, 2009). This can be partly explained by the fact that many of the members worked or had worked as principals and teacher before their role as school administrators. However, they seemed to describe satisfaction significantly more often than other positive emotions. The high frequency of reporting satisfaction might indicate that the steering group members developed and employed hands-on strategies of sense-making that they perceived to be functional and proving solutions for the challenges faced.

The results also showed that the sense-making strategies differed in terms of quantity of emotions they evoked, and whether they evoked more positive than negative emotions. The most emotions were reported regards to *engaging educational practitioners in learning* and building *bidirectional resilience*, i.e., the strategies that most dealt in the interface between the district and schools. This might be due, because the success of the reform depends crucially on whether educational practitioners take ownership of it and participate in it? In turn, being engaged in *integrating the curriculum process into the local development work* as well as *prioritising and focusing* evoked the least emotions. These differences indicate that *engaging educational practitioners in learning* and building *bidirectional resilience* were used when they made sense of the most significant issues, while *integrating the curriculum process into the local development work* as well as *prioritising and focusing* when negotiating about the meanings of issues they considered less significant and making fine adjustments to the local curriculum.

The sense-making strategies also differed in the distribution of positive and negative emotions. Most strategies evoked more positive than negative emotions, implying that they were perceived as functional and meaningful by the participants. However, using the strategy of *bidirectional resilience* evoked more negative than positive emotions. As shared sense-making is likely to shape and be shaped by emotions (see e.g., Leary, 2000; Oatley, 2000; Parkinson et al., 2005; Zembylas et al., 2011), the most likely explanation is that the local steering group members employed the strategy of bidirectional resilience, i.e., anticipating the sensitive phases of the reform process at the district-level and return to the phases they estimate to be crucial for facilitating district-level reform process, when experiencing negative emotions induced by challenges or even failures in the reform process. The sense-making strategies which evoke primarily negative emotions such as disappointment, frustration, and dissatisfaction, may not be functional in achieving the goals, but may result in local steering group members' disengagement from the reform implementation in the long run.

The results provide several directions for future research on emotions in educational reforms. First, as emotions in educational reforms is still under investigated field of research more research on this topic is needed to understand what are the factors that make or break the reform. Second, the emotional markers of a successful reform should be mapped both longitudinal and in different levels, in order to understand why some reforms succeed and how we could foster the beneficial emotional experiences in the reforms.

Practical implications

The findings of the study imply that making sense of how the local level curriculum is reformed evokes a variety of both positive and negative emotions in those involved. Furthermore, the findings imply that there are differences in the emotions between the ways of making sense of the reform. Hence, the findings have several implications for school development. First, collaboration is likely to provide a significant source of support, and hence in designing large-scale curriculum reforms, wide collaboration within the reform should be promoted (e.g., Saunders, 2013). However, the groups can also provide an arena for co-rumination (Rose, 2002), which may increase the likelihood of emotional contagion (e.g., Boren, 2013). Therefore, the architects of the reform should be aware of this and provide emotional support to those having an intermediary role in the reform. Second, according to the results, being involved in *engaging educational practitioners in learning* evoked a significant number of positive emotions, implying that the strategy is functional and can promote the local steering group members engagement in the reform. From the perspective of forthcoming reforms, the use of such strategy, i.e., aiming to convey the knowledge adopted in the steering groups into resources for learning at the

school level by building participative forums and forms of collaboration for teachers and developing transformative practices guided by the new curriculum in the school communities, should be encouraged by those in charge of the curriculum reform. Last, the findings indicated that most of the negative emotions were described while employing the strategy of building *bidirectional resilience*. Development processes never succeed at once, but rather require reversing and trying again. Thus, the strategy is highly important part of any reform process. The local steering group members should be familiar and understand the nature of development work in order to manage the intensity of the negative emotions that can further disengage from the reform work.

CONFLICT OF INTEREST
No potential conflict of interest was reported by the authors.

DATA AVAILABILITY STATEMENT
The data from this study are not available due to ethical restrictions. The participants gave the consent for using the data only for scientific purposes within the research group.

ETHICS STATEMENT
This study followed the ethical guidelines of the Finnish Advisory Board of Research Integrity (2012) for the responsible conduct of research. In Finland, an ethics review is required when research involves intervention in the physical integrity of research participants; deviates from the principle of informed consent; involves participants under the age of 15 being studied without parental consent; exposes participants to exceptionally strong stimuli; risks causing long-term mental harm beyond that encountered in normal life or signifies a security risk to subjects. None of these conditions were encountered in this study.

GEOLOCATION INFORMATION
The data were collected from Finland.

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