

Dimensions of teacher students’ professional knowledge development in a dialogue with creative music teaching

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ABSTRACT

This contribution aims to show how the dimensions of a dialogue can be translated for a tool to analyze professional knowledge development of teacher students. For this purpose, an international exchange project, focusing on creative music teaching, was implemented. Swiss and Finnish students participated in the project, and their dialogical collaboration was being analyzed for the purposes of this paper. The 9-month-project involved six early childhood- and primary education teacher students and two teacher-trainers. The main steps were accessed via the collected data, which was organized and analyzed through the main components of the Multisensory Musical Design (MMD; Marjanen 2021a): faces, spaces, and timelines. At MMD-model, these three are being understood as dimensions of a dialogue. As the first step, students’ meaning creation processes towards the understanding of creativity and music were described in terms of faces (encounters), which were observed in space and time. As the second step, the links to professional knowledge for teaching were presented in reference to the Learning-by-developing (LbD) model (Raij, 2014). The findings of our conceptual analysis pointed out the richness of multimodal dialogues experienced by the students. Professional knowledge towards creativity in music teaching had been developing through a complex intra- and interpersonal dialogue over time. It appeared that experiences with music and arts, in various spaces, in both countries (schools, nature, culture), led the student teachers to a more integrated perspective on creative music teaching. The use of dialogue as a concept to analyze the project appeared to be particularly relevant towards the purposes of taking into account the intercultural context and the students’ subjective understanding of theoretical knowledge through a lived experience. The whole theoretical reframing of the study gave us a new theoretical input as a support to the development of generalist and specialist teacher training.

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1 Introduction

Teachers are supposed to mobilize their professional knowledge towards the abilities to translate it for appropriate learning situations according to the curricula framework. Fostering creative teaching and learning can be found as a strong focus in recent school curricula. Similarly with other European countries, also in Switzerland and Finland, primary teachers are supposed to teach in a creative way, especially supported by arts education. This kind of teaching is supposed to develop pupil’s creativity. As argued by Jeffrey and Craft (2004), teaching for creativity and creative teaching are not being separated: both the approaches are tightly intertwined. According to Russell-Bowie, generalist teachers, however, are often less confident in their capacity to creative music teaching, due to the lack of technical and theoretical knowledge of the subject/discipline. This can

lead to a low self-esteem towards creative music teaching (Russell-Bowie, 2012), supported by the findings of Suomi (2019) and Repo et al. (2019). Hence, the challenge for teacher education can be set for finding efficient ways to encourage students to develop their creative professional knowledge in (music) teaching through practice-based experiences, on one hand, and on the other, through a strong conceptual framework. In addition to models on professional knowledge for teaching, in general (Shulman, 1986), and more specifically, in music teaching (Godau & Fiedler, 2018), we suggest to include the meta-cognitive and personal knowledge in teacher education. Research references support the current understanding of dialogue and dialogic principles in education (Wegerif, 2011; Gruber, 2019), and thus we argue that the reflection on subjective meaning making should be considered as a part of teachers' professional knowledge, especially for generalist teachers.

In order to identify the potential of dialogic principles for teacher student's professional knowledge development, a conceptual analysis of an international exchange project with altogether six Swiss¹ and Finnish² students implemented in 2015–16³, is being presented here. At the project, it was argued that the construction of professional knowledge in the framework of early childhood – and primary school settings can be supported from the core of music teaching. The specific aim of the project was to develop the students' capacity for creative music teaching, defined as teaching in an integrated way to foster pupils' creativity. By documenting the whole process over the 9-month-period, positive changes in self-esteem and attitude towards creative music teaching and learning were observed (Marjanen & Chatelain, 2016). In the present contribution, the meaning making process throughout the whole project was being analyzed under the lenses of dialogic principles.

2 Dialogue and creative music teaching

Dialogic principles can be considered as the basis for meaning creation, inspired by the work of Wegerif (2011). By pointing out the importance of intrapersonal dialogue, the subjective element of meaning making in learning processes is being underlined. These principles serve the needs to explore and understand the meanings of intra- and interpersonal aspects between humans and objects to generate new understanding of the inner and outer world, giving meaning for experiences and concepts. Dialogue in music education is known to include linguistic and emotional, embodied aspects of knowledge (Vass, 2019). On one hand, the dialogical structure of music making is an essential element for creative music teaching (Lage-Gómez & Cremades-Andreu, 2019). On the other hand, the integration of music into a wider reflection on pedagogical approaches for generalist teachers in (pre)primary education is supposed to be fostered through dialogic principles in teacher education (Gruber, 2019).

2.1 Multisensory Musical Design: three dimensions of dialogue

Musical communication can be found at the center of Multisensory Musical Design (MMD) -model, connecting with the MMD main phenomena, faces, spaces and timelines (Marjanen, 2021a). Music in communication is being explained from several theories to combine music and languages, with the shared musical-linguistic elements to serve as a ground to access the designing of the three main dimensions of the MMDesign. These serve as a foundation also for creative expression, starting from the need for emotional expression, being accessed in bodily-emotional ways, and defined by the prosody of language (Brown, 2017). Musical meanings connect with values and the formation of a wider understanding of knowledge in a positive atmosphere through:

- *Faces: recognition of oneself and the other by facing music as a socio-cultural object in various forms – identity, communication, trust, reflection, social & emotional capacities, and qualities. Me in music/ you in music.* Music speaking to us

¹ The Swiss students were students for primary school generalist teacher training. Their degree, a Bachelor of Arts included a teacher's diploma for a kindergarten teacher (4–8-year-old children) or a classroom teacher (9–12-year-old children).

² The Finnish students came from the field of social services, with a specialization possibility for early childhood education, to earlier qualify for an early childhood teacher, and later for an early childhood socionom qualification, with a stronger orientation for wellbeing structures and targets than traditional teaching. Their degree, a Bachelor of Social Services qualified also for a kindergarten teacher qualification (0–6-year-old children). In Finland, an early childhood teacher qualification is given by the scientific universities. Laurea and other UASs provide the early childhood socionom degree, currently.

³ *Projet d'Etudiants et d'Enseignants chercheurs en Réseaux Sociaux/Project for students and teachers collaborating in research with the support of social media* (HEP Vaud, Switzerland).

will make our minds moved and help us sensitively listen to our own inner sounds and thoughts, but also foster the connections with other individuals, supported by better listening and presence abilities. Individual and social learning confront each other in music – and in other creative pedagogies.

- *Spaces: meaningful experiences supported by multiple sensory modes, spaces of minds, over-generational and intercultural, sounding environments, visual environments and the regulation of space, and the practical pedagogical solutions to support education via spaces.* Sounds through musical elements create and mediate feelings and atmospheres towards cognitive and emotional awareness and meanings. These spaces are culture-oriented, connect with experiences in multisensory modes (being intertwined in faces) and transmit tacit information from one generation to another, and from a cultural group to another. Spaces can be concrete places and rooms, but also emotional, cultural, and aesthetic spaces, as explained in 21st century learning (Binkley et al., 2012), and the idea of creative classrooms (Bocconi et al., 2012).
- *Timelines: sensory, holistic mindscapes to remember, be present, and visualize towards the future.* Our experiences through music are strongly captured by time, and time oriented. Music lives in time, and musical experiences connect with holistic ones, with feelings of belonging in a certain time and place. These moments can be brought back in our minds from the past to the presence and they support our comprehension of time, with visions towards the future: imagination and creative thinking connect strongly as spaces with musical time experience.

Understanding the emotionally grounded starting point for communication already since the prenatal development and learning processes (Chamberlain, 1995; 2003; Parncutt, 2009), with the significance of the creative performance of the prosody to sit between language and music (Brown 2017), helps connecting with the others in a creative interaction. MMD creates a solid ground for the current research.

2.2 Meaning creation through intrapersonal dialogue: oneself and the other

The phenomenological approaches for pedagogy connect with living experiences as a ground for learning, taking into account the subject and its perception (van Manen, 2017). Learning as an experience is then “experience-centered” (Vass & Deszpot, 2016), oriented on the productive construction of meaning (Brinkmann, 2017), based on intra- and interpersonal dialogue (Wegerif, 2011). Within a paradigm shift to phenomenological pedagogy, the ideas of Waldenfels (2007; 2017) were integrated in German pedagogical theories during the 1980s and 90s (Brinkmann, 2017; Lippitz, 2007). In his philosophical approach, Waldenfels introduces responsivity as a way to meaning creation. Each experience is being considered as something that happens to someone, to lead to a response engaging the whole person, tightly connected to his feelings and the living body. Sense making or understanding becomes then possible through perceiving and responding to the experience [reflection], to impact the person (Waldenfels, 2005; 2017). It is based on the interaction between ownness – referring to oneself as one’s own capacity – and alienness, being present in all human experiences. The alien or the foreign (*das Fremde*) means that all experience confronts the subject not only with a part of another, but also with a part of one’s own “foreignness/alienness” (*Fremdheit*⁴). The responsive difference can be described as the gap between what we hear (the total amount of the audible sounds) and what we finally really listen to (the part of what we can dive into, which really affects us). The difference between the concepts of hearing and listening or seeing and watching is essential. If we want to understand [to listen, to watch] something new, it will be necessary to quit existing habits (Waldenfels, 2017, p. 31⁵). The observer responds on the part which really affects him, provoking a subjective reaction. Consequently, the attention is focused on actional, relational, embodied and situated aspects of meaning creation, on the space “in-between” (Friesen, 2014). In this perspective, learning is both a process and a system and it is always relational. Relation between the others, the world and within oneself is considered as essential for meaning construction (Künkel, 2011). But the relation is constructed by an “inwoven subjectivity” (Stang, 2016, p. 530)⁶.

⁴ Friesen (2014) argues that the word *Fremdheit* is difficult to translate in other languages. So other terms like foreignness or stranger can be found in English translations. Alien focuses on the unknown which is different from otherness. Obs. Here, it might be worth mentioning that the limits of one’s linguistic abilities may lead us to these assumptions: e.g., in Finnish language we may find translations for *Fremdheit*: “*muukalaisuus, vieraus, outous.*”

⁵ “Hörbar wird, was nicht schon hörbar ist, solange wir uns nicht blossen Hörgewohnheiten überlassen und lediglich hören, was wir bereits kennen.”

⁶ “*Die Beziehung zum Anderen wird konturiert durch die in Beziehungen eingewobene Subjektivität.*”

Two aspects seem useful, as a support for this research. Firstly, the dialogue between oneness and alienness in these specific intercultural contexts supports our study. Secondly, the importance of interaction and subjectivity for the process of meaning creation sheds light into it. We may state at the end, that these creative reflections are consequences of the musical phenomenon, to reflect in faces, spaces, and timelines due to the musical-linguistic elements to start the interactive and reflective processes, ultimately (Marjanen, 2021a).

2.3 Creativity in teaching: the role of dialogue

From the perspective of cultural psychology (Bruner, 1996; Vygotsky, 1925/1971), creativity in the classroom is a dialogic process of collaborative meaning construction through specific tasks in music education (Giglio, 2015). Pupils learn by interacting, mobilizing their imagination and fantasy to realize their own productions. Imagination is an intrapersonal quality, and the co-construction of meaning can be considered as an interpersonal aspect. According to Marjanen, this connects with the needs of being able to recognize oneself, and the other. Imagination needs to be comprehended, besides an interpersonal quality, also as a creative space, connecting with wellbeing experiences (Marjanen, 2021a). Based on “possibility thinking” (Craft, 2005), the development of pupils’ creativity affords high value to curiosity, risk taking, ownership, autonomy and connecting (Cremin, 2009). Also in music learning, pupils need to find the encouragement to take risks, and fail. From a more aesthetic point of view, the interaction between arts and pedagogy can be comprehended as particularly valuable (Giacco & Coquillon, 2016; Eisner, 2003).

As an example, creative processes in arts education, as shown by the research of Gosselin et al. (2014), clearly points out towards the constant dialogue between artistic and pedagogical perspectives to develop teaching competencies. Creativity can be considered as a specific capacity of a continuous dialogue between openness to divergent ideas, with a focus on an original product adapted to a specific context (Lubart et al., 2003). The interaction between idea generating and realization is being based on constant interaction between these two ways of thinking (Mayer, 1999).

To enhance pre-service teachers’ expertise towards creative music teaching, students should be encouraged to identify their own creativity, to get confidence in their potential as a ‘versatile artist’ (Burnard & Murphy, 2013). It means the ability to recognize one’s own identity and voice, to be able to approach it in a confident way, with a positive feeling. Following this perspective, teachers are supposed to develop their own lifelong creativity as a ground to stimulate pupils to be creative. Support gained by the conceptualizing of these ideas helps to identify *spaces* and *timelines*, to recreate new, open attitudes in a dialogue with the abilities to recognize *faces* of oneself and the other, and to create a confidential collaboration. (Marjanen, 2021a.) Nevertheless, as Jeffrey and Craft (2014) point out, teaching creatively and teaching for creativity, which are strongly related, are not only supported by teacher’s creative practice, but also by specific pedagogical skills and by theoretical knowledge. So, specific teaching strategies, such as open-ended tasks, space and time for responsibility and ownership/authorship of the learner, and space for collaborative exploration and classroom discussion should be developed. Teachers, especially in the pre-primary and primary education, act as a role model and are supposed to scaffold pupils’ activity in a specific way (Giglio, 2012). A clear understanding of their own stance towards the pupils’ engagement (Craft, Cremin, Burnard & Chappell, 2007) can be considered as a condition for this kind of learning.

2.4 Teachers professional knowledge development

The specific professional knowledge for teaching has been analyzed through various models. The widely used Pedagogical Content Knowledge (PCK) model developed by Shulman (1986) distinguishes knowledge related to a specific discipline (content), pedagogical knowledge and the pedagogical content knowledge. Its augmented version, the TPCK model with the addition of technical knowledge at the original model, had been adapted for music education (MTPACK) by Godau and Fiedler (2018). As resumed by Sjöberg and Nyberg (2020, p. 226), teacher’s professional knowledge is related to their personal knowledge. More recently, teachers’ action was described as enacted knowledge including knowledge and skills regarding planning, enacting and evaluating, for example by Gess-Newsome (2015).

According to the model of Learning by Developing (LbD), implemented in multiprofessional higher education in Laurea UAS, Finland (Raij, 2007, 2014), professional knowledge is determined as interaction between different types of knowledge. The

interactions between knowledge through theories and models, experiential knowledge, knowledge embedded in skills and abilities, and moral knowledge (Raij, 2014, p. 7) contribute to the development of professional competencies. By adapting this model specifically for teacher education, the metacognitive aspect was being integrated, replacing the moral dimension of Raij's model. However, moral knowledge, as an important teacher's aspect, is comprehended here, instead of a dialogical component, as a result of the holistic dialogue, connecting with the meanings of arts as a human capacity (Marjanen, 2021b). Because of the metacognitive knowledge aspect, teachers' competencies can be highlighted as a part of reflective practices (Schön, 1983) by pointing out knowledge as its own way to analyze the implemented actions. Experiential knowledge describes the personal experiences accumulated by the person. Theoretical concepts are related to content knowledge, for example in music, as well as to pedagogical and pedagogical content knowledge. Knowledge embedded in skills and abilities means the ability to act based on specific knowledge, here being defined as enacted knowledge (Gess-Newsome, 2015). As shown in Fig. 1, these different forms of knowledge enter into a dialogue during various activities like planning, realizing, observing and analyzing, to recreate moral-ethical awareness in a long-term maturation process.

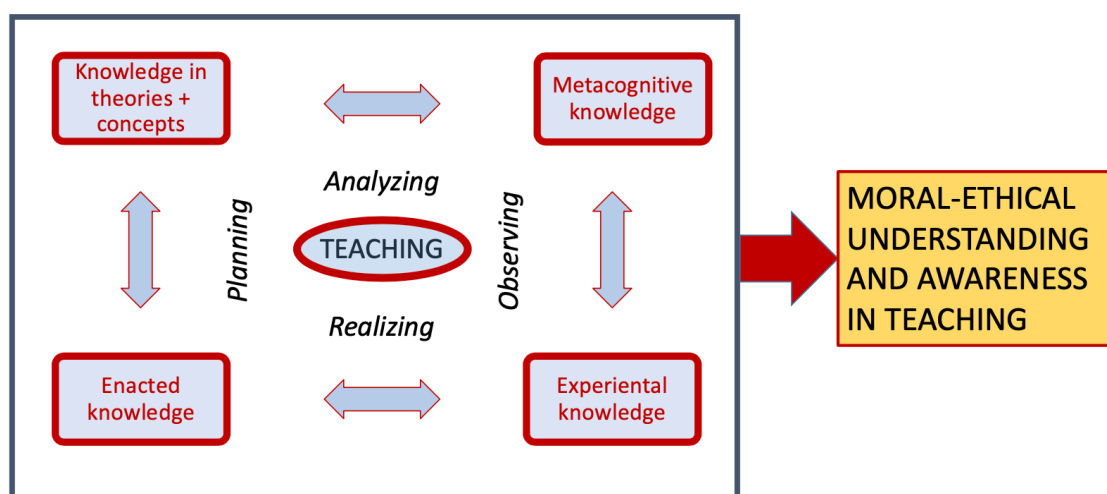


Figure 1. Professional knowledge for teachers, adapting the Lbd model (Raij, 2014).

2.5 Professional knowledge for (pre)primary teachers in Finland and Switzerland

Professional knowledge for teachers in early childhood education requires a wide-oriented comprehension of the child's learning and environment as a holistic framework, to access the defining of the goal-setting for the needs of the children by the teacher students. To be able to teach small children, a teacher needs to have an inner experience-based understanding of the holistic ways of learning, supported by experiences in various disciplines. Moreover, a clear conceptual understanding of subject specific and transdisciplinary concepts is needed.

The Finnish National Curriculum for Early childhood education (2018) includes the orientation starting from the child's well-being and learning at the very core of education, care and fostering, supported by the values, and learning comprehension as a ground: the working culture, learning environments, activities performed, multiple collaboration, pedagogical documentation, evaluation and developing. The values and learning comprehension are maintained by a dialogue with wide-oriented learning as a response, including thinking and learning, cultural abilities, interaction, and expression skills, being able to take care of oneself in everyday situations, multiple literacy and ITC skills, and participation and influencing. This all as a holistic framework is directed and supported by the interests and needs coming from the child, to respond by the teacher via the learning areas: the rich world of languages, multiple ways of expression, me in our community, investigating and acting in my environment, and growth, movement, and development. (Finnish National Core Curriculum for Early Childhood Education, 2018.) When continuing towards the primary school settings, the same comprehension serves as a ground for the Finnish national curriculum, but the subject- and competence -oriented emphasis becomes clearer, step-by-step, with a strengthening trend hand-by-hand with the target group growing elder (Finnish National Core Curriculum for Primary School Education, 2014). In

both national curricula, the teacher's own understanding of art education as integrated in the phenomena-based learning processes is phenomenal, thus leading to the competences at all fields of arts education, being constructed during the teacher education.

The Swiss curriculum for early childhood (first cycle of the primary school) is more competence oriented, giving clear goals in each domain of disciplines. Arts education in general is supposed to develop the child's capacity of perception and expression within a perspective of identity, communication, and culture. Creative music making is being found to develop the child from the beginning of music learning, which means that generalist teachers have to develop subject specific knowledge in music and pedagogical content knowledge for creative teaching. It is phenomenal to understand that the subject-oriented core comprehension is needed in any cases, to access the teaching-learning -interaction, not only supporting the Swiss, but also the Finnish curricula. This all creates a clear vision towards the degree programs for teacher education and early childhood teacher education as the core focus of the current paper. Starting from these reflections, the basic structure for our theoretical approach is described in Fig. 2.

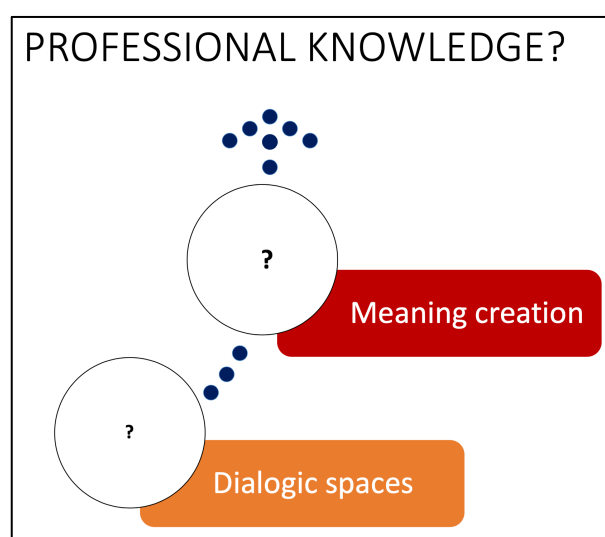


Figure 2. The use of dialogue for professional knowledge development.

3 The Research

3.1 Project implementation through faces, spaces, and timelines

Laurea UAS had the privilege to participate in the project PEERS, invited by HEP Vaud Lausanne, Switzerland. The Swiss partner had the opportunity to discover the LbD model of Raji (2007, 2014), being the pedagogical foundation at Laurea UAS, Finland. It was a win-win situation, to motivate both the partners. New research-oriented learning tasks were elaborated as a support for the professional training. The project core idea was constructed on two periods of face-to-face exchange and phases of distant learning in collaborative environments: a week in Finland (October 2015), virtual collaboration, and a week in Switzerland (April 2016).

Three kindergarten-(socio)nom) students from Finland, and three primary school teacher students⁷ from Switzerland with their two teachers from both institutions participated the project in 2015–2016. The project theme was chosen together with the students and teachers, to support the development of the project, giving it a red string. The chosen theme was " *Music education, creativity, and self-esteem*". The project aim was embedded in the idea of music as sound-based education, functioning as an integrated platform for learning. Based on a tight program, mainly designed by the students, the Finnish face-to-face week included:

- *The construction of the main theoretical framework*: the identification of the project theme, focus and goals, with the individual sub-themes and approaches to be determined with the support of group and pair-work (*faces; timelines*);

⁷ However, the target groups of the Swiss primary teachers are shared with the Finnish early childhood teacher students: primary school in Finland starts at the age of seven, and before that we talk about pre-primary, and early childhood education.

- *Arts and music experiences, to reflect the Finnish culture, people and way of life:* Villa Kokkonen⁸, home of Sibelius⁹; visiting the temple of silence¹⁰, sauna; nature, forest and environment experiences (*spaces*);
- *Education system and curricula as a ground and in practice:* daycare with forest and music sessions and lunch, preschool, primary school, and secondary school visits (*spaces*), university courses and discussions (*faces, spaces*); and
- *Gastronomical culture:* breakfasts, lunches, dinners shared together (*faces, spaces and timelines*)

As processes in virtual spaces, each group of students proposed

- a synthesis of their experience, by the choices made according to the use of their own media as tools to express and describe the experiences (photos, narrative, poetic expressions, songs and music, diary/journal, reflective writings)
- lesson plans for teaching sequences, for their own groups/classes; with post-reflection and discussions with others towards the dialogical comprehension.

Before the Swiss week, individual, pair and group tasks to gain the aims set, were processed. The Swiss face-to-face week in April 2016, to end the project, prepared by the Swiss team, included experiences, and resulted in the form of:

- *Arts and music experiences, to reflect the Swiss culture, people and way of life:* musical portraits in the Abbey of Monthéron, created by the Swiss musician Daniel Thomas; visiting Lausanne; staying together in the Alp mountains with music making (*spaces*);
- *Education system and curricula as a ground and in practice:* school visits, all levels, also the secondary school; university courses and discussions (*faces, spaces, timelines*);
- *Gastronomical culture:* breakfasts, lunches, dinners prepared and shared together (*faces, spaces, and timelines*); and
- *Closing of the main theoretical framework:* comprehension to respond the identification of the project theme and focus, with individual reflections, with group and pair work included. The project resulted and produced a final presentation, with musical performance & PowerPoint presentation made by the students for the teachers and collaborators.

The project was closed from the point of view of

- Project administration:
 - writing of the project reports by the students
 - interviews made with the Swiss students
 - writing of the reports for the universities by the lecturers
- Pedagogical, creative and scientific closing
 - a colloquium presentation by the Swiss students
 - a reflection discussion with the Finnish students to close the project
 - a creative project presentation by the Swiss and Finnish students as learning results
- Further scientific development
 - writing of a thesis from the Peers-project experiences¹¹ by the Finnish students
 - the thesis presentation and discussion with the Finnish students
 - research publications by the lecturers, starting with the first publication in 2016¹²

During each phase, students performed the tasks given collaboratively and independently, depending on the task in question. They were asked to define creativity and to plan a teaching–learning sequence by integrating their specific interdisciplinary personal interests as a part of the pedagogical plans. Connection was maintained in between the visits, supported by video conference calls, virtual learning spaces, e-mail and social media, and directed by the tasks to be observed, discussed, processed, created, performed, and reflected. The teachers from Finland and Switzerland supervised the students in close collaboration, to

⁸ <https://www.villakokkonen.fi/en>

⁹ https://www.ainola.fi/eng_index.php

¹⁰ <https://www.thecrowdedplanet.com/five-almost-free-things-to-do-in-helsinki/>

¹¹ Klenberg & Syrjälä-Lindfors (2017) <https://www.theseus.fi/bitstream/handle/10024/136800/Klenberg%20ja%20Syrjalala-Lindfors.pdf?sequence=1>

¹² Marjanen & Chatelain (2016): The Peers Project: Integrated Music Education to Foster Professional Identity <https://www.theseus.fi/bitstream/handle/10024/121243/Laurea%20julkaisut%2072.pdf?sequence=3> within the Framework of the Laurea Learning-by-Developing Model (Raj, 2007)

create dialogical inclusion together with them. As the students stayed overnight with their colleagues, a lot of informal communication was included in the project, considered as significant for the results.

3.2 Research philosophy to underpin the research implementation

The phenomenological approach supports the orientation of the interpretation of experiences, connected with an individual's relationship with his/her own life realities: a human individual cannot be understood separately of that relationship. The musical phenomenon, resonating in the human emotions, at the body and cognition (Hannaford, 2004) defines the motivation towards the human experiences, which were recreated in relation to meanings and comprehended as the actual target of the analysis. One of the basic theories in phenomenological analysis of meanings is, that the human being is being social by nature (Regelski, 2021; Vygotski, 1978; Wenger, 1998) thus the source for meanings is the community in which everyone is being grown and fostered (Marjanen, 2021a). Intersubjective meanings are interrelated and inclusive for the subjects in question. (Laine, 2010, pp. 29-30.) Natural surroundings provide the researchers the best circumstances for understanding human behaviors (Vilkka, 2014). Currently, the natural surroundings may transform due to the changing cultural surroundings, being natural by nature, but also strange due to the new cultures encountered. This framework creates and defines the holistic comprehension for the needs of this research project.

3.3 The research question

Starting from the conceptual framework of dialogue, the following research question was formulated: *How would the dimensions of dialogue (faces, spaces and timelines) support the student teachers' professional knowledge development in an intercultural exchange project?*

This was observed from two perspectives:

1. Which dimensions of dialogue would be implemented towards the understanding of creative music teaching throughout the project?
2. How would professional knowledge develop throughout the project?

This holistic framework was opened via the theoretical ground presented in Chapter 1, to create guidelines for the research aims, methods, analysis, and an interpretation of the data towards the research results. The approach of this investigation is strongly qualitative with human comprehension, being supported by the phenomenological-hermeneutical framework (Mälqvist, 2015; Laine, 2010; Metsämuuronen 2008), in an interaction with the MMD model (Marjanen, 2021a). Arts-grounded and culture-oriented experiences are taken as meaningful components in the professional knowledge formation processes on the grounds of the presented theoretical framework.

3.4 Research method and data

For the purposes of this study, the Laurea UAS pedagogical approach called Learning by Developing (LbD; Raij, 2007, 2014), together with the MMD model (Marjanen, 2021a), provided a framework for a conceptual analysis of the project. The training programs for the Bachelor of Social Services (socionom)/kindergarten teacher (210 ECTS) and the classroom teacher (180 ECTS) created the framework for the professional development. The six participants of the project were adults with earlier background from working life at various multiprofessional fields. The motivation and interest towards the project were evident, but also the thresholds to exceed were high. The students knew that the project language would be English, which was nobody's mother tongue. Abilities to "throw oneself in to the flow" would be needed.

During the project, following data was collected:

- the project plan, including school visits and cultural events (lecturers);
- students' meta-reflections (formal and informal feedback) with theoretical grounds: three written feedbacks from each of the Finnish students (5 ECTS); two feedbacks (written/oral) from each of the Swiss students (3 ECTS);
- PowerPoint-presentations of the students (final phase and post-project for the Swiss students) one Finnish Bachelor Thesis.

3.5 The analysis and interpretation of the data

The analysis performed was grounded on multiple data sets, to create the phenomenological-hermeneutical triangulation process with the idea of triangulation in data-, theory-, researcher- and methodological modes (Cresswell et al., 2007). This approach supports the qualitatively oriented goals of the research, and the deep-level comprehension of the holistic communication, with the adaptation of the meanings of shared music experiences (Marjanen, 2009) at the center of this research. For the present paper, linguistic, explicit expression, and production: written teaching ideas, lesson plans, evaluations, reflections, notes as well as the general plan of the whole project were used. The aim was to identify, describe and reflect the phenomenon with its parts from various angles by pointing out the importance of dialogue. This was supported by the close and detailed discussions between the lecturers as researchers in this setting.

Phenomenology was complemented here, supported by the hermeneutical processes. Via the hermeneutical comprehension, it was possible to use interpretation of interpersonal communication as a focus, observed via individual ways of expression (Laine, 2010, p. 32.) The idea of a hermeneutic circle as described by Mälqvist (2015, p. 2) is presented in Figure 3. In his study, the focus was set towards the aims of understanding culture and religion for healthcare behavior, with the awareness of the phenomena being guided by perceptions and traditions (Mälqvist, 2015, p.1). The phenomena and concepts in Mälqvist's research (2015) can be found as similar by nature with the phenomena at the current research, which creates a connection between these investigations. At the hermeneutic circle (please see Fig. 3), he presented the needs of critical reflection during the process, with several subprocesses accessed through the MMD main concepts, faces, spaces and timelines.

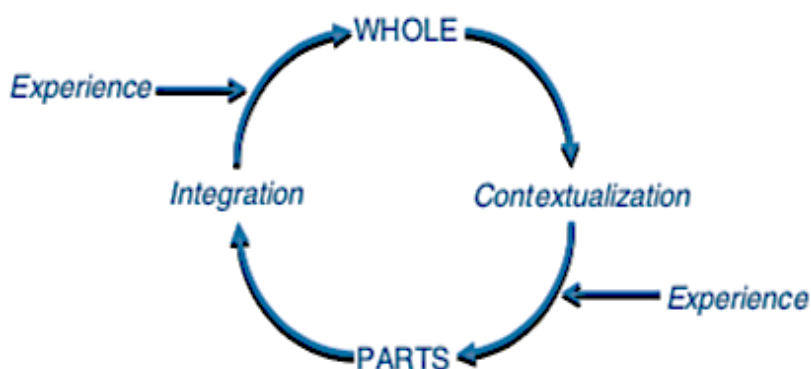


Figure 3. The hermeneutic circle of interpretation (Mälqvist, 2015, 2).

The chosen approach for the comprehension of knowledge was being defined from the teacher's needs for understanding and benefitting a holistic way of knowledge, being intertwined in communicational activities, to define the incidents of learning. The comprehension of knowledge from the perspectives of arts-grounded emotional-bodily-cognitive experiences and processes was being described in a holistic way by Marjanen (2021a), with the significance of multisensory experiences to impact learning and the creation of knowledge. At the analysis, these multiple ways of knowing were being observed, to create a hermeneutic circle as experienced by the students. The holistic comprehension of knowledge was being explained through the inner dialogues with the MMD main concepts.

4 Findings: Dialogue to analyze teacher students' professional knowledge formation

In order to show how the dimensions of dialogue (faces, spaces and timelines) could support the understanding of professional knowledge development for student teachers in this project, the findings for each subquestion are presented first. Then, more general conclusions are being proposed.

4.1 Dimensions of dialogue

The whole project design and data set was organized through the dimensions of dialogue derived from the MMD model (Marjanen, 2021a), to answer the first subquestion: *Which dimensions of dialogue were performed towards the understanding of*

creative music teaching throughout the project? Students' meaning making took place during the face-to-face project and the reflection phase. They shared their understanding of creativity and the role of music in different spaces in both countries in order to develop their personal and professional knowledge. To point out the complexity of the meaning making process in the intercultural context, four subdimensions (intra/interpersonal and intra/intracultural) were added. This is being shown as an example at Table 1 below:

Table 1. Dimensions of dialogue during the project.

Dimensions & sources	Subdimensions	Examples of student's meaning making process
Faces Encounters through music & arts	Intrapersonal dimension	<i>Music is a tool to bring out what you have inside, it is connected to emotion and motion. (Feedback 1, Finnish student 1)</i>
	Interpersonal + intracultural dimension	<i>What I learned through the Finnish musicians is that music, creativity and self-esteem have nothing to do with becoming a celebrity, but to do with: breathing, living here and now, sharing what we like the best to others, opening our mind to whatever could come, as the little drops make the big rivers. (Feedback 1, Swiss student 5)</i>
	Interpersonal + intercultural dimension	<i>We were able to see us and what it is to be a Finn with other people's eyes. (Feedback 1, Finnish student 3 after the week in Finland)</i>
Spaces Schools Nature Monuments, concert halls, churches... Private spaces	Intrapersonal + intracultural dimension	<i>I think it was very nice when they [the children] were singing in the forest. I knew those songs well so I could sing with them. They sang songs while walking, playing together and feeding ducks, they had a song for every situation. (Feedback 1, Finnish student 3/pre-primary school children in the forest)</i>
	Intrapersonal dimension	<i>I think we need to experience also silence in order to be able to be creative and to appreciate music as well. (Feedback1, Finnish student 1)</i>
	Intrapersonal and intercultural dimension	<i>During our visit weeks first in Finland and then in Switzerland I was able to observe our own country with different eyes. (Feedback 2, Finnish student 3, after the whole project)</i>
Timelines Project phases face-to-face (Finland & Switzerland) Reflection phases	The past (memories)	<i>All those [Finnish]songs have a meaning for me, they bring me memories and strong feelings. (Feedback 1, Finnish student 3)</i>
	The present moment	<i>Creativity is somehow like shadows, it happens to come through, to exist for a while, and then disappears as quickly as one could become aware of it. So, when you get conscious of it, do not wait: take it, make an 'arrêt sur image'. (Feedback1, Swiss student 5)</i>
	The future	<i>This was as an example of the children's natural and uninhibited creativity, which easily blooms up in day-to-day situations. The question is how to make use of it and engage the whole group in a satisfying way. (Feedback 1, Finnish student 1)</i>

4.2 Aspects of professional knowledge development

The exploration of small data sets at deep levels supported by the shared, mutual experiences between the whole project group, fostered the researchers to identify and recognize the process parts towards the development of the students' professional knowledge. In student's feedback the subjective expression of thoughts and feelings allowed the students to enter into a dialogue with their representations of concepts linked to their professional knowledge. This appears clearly in the examples where students express their updated and renewed understanding of creativity in general, and its role for teaching music and other disciplines.

In reference to the adapted LbD-model (Raij, 2014), four knowledge dimensions were considered to connect with teachers' moral awareness. Throughout the project, students' experiential knowledge was enhanced by the significance of experiences in various spaces. Creativity, explored in parallel as a theoretical concept, became meaningful through observations and analyses of teaching situations (metacognitive knowledge) and the students' own teaching experiences (enacted knowledge). The intra- and interpersonal dialogue contributed to a new professional understanding of creativity and music teaching in the context of music teaching in (pre)primary classes. Students widened their knowledge regarding music and teaching, and opened their mind to creativity and its importance when working with children (oral feedback, Swiss students).

Metacognitive knowledge of teaching music to young children by fostering their creativity was considered as a challenging task at the beginning of the project. Over time, the students' understanding was changed. The process of knowledge development can be considered as a constant dialogue between internal reflection and interaction with the environment. After facing music and sounding environments in different spaces, students explained their subjective understanding in creative ways (notebook, drawings, pictures, narratives). At the same time, they observed children at school, to plan their own teaching. As a result of their reflections, they gained a better confidence to access new settings in an integrative perspective like drawing for music or story telling with music.

At the end of the project, students declared they had gained a changed understanding of music in human life in general, with the potential places of music teaching for young children by using sounds, the voice, the body and instruments. Their understanding of creativity, originally being linked with the characteristics of professional artists, had also changed during the process. Finally, creativity was acknowledged as present in children's performances, in everyday practices. Creativity became a useful concept for everyday classroom teaching:

First when I began to think about music, creativity and self-esteem, I thought I needed to carry out something very big, special and wonderful. Then I realized that ordinary little moments are very special and important and affect a lot to our creativity and self-esteem (Feedback, Finnish student 3).

The students expressed a new understanding of their role as a teacher:

Adults should fertilize children's self-esteem by admiring, respecting and enjoying the children's creativity in all its forms (Final feedback, Finnish student 1).

Most of all, it was phenomenal that they had gained "trust into their own creativity".

5 Creativity in dialogical processes to foster teacher's professional knowledge

Experience-grounded comprehension was provided at the individual levels and accessed by the meta-structures being defined in cultural, personal, and virtual spaces, with the significance of exchanging experiences. When observing the meaning creation and space-oriented processes through dialogues supported by different media and modes like self-reflective texts, mind maps, photos, music recordings, videos and songs, a need to explain the significance of those was identified.

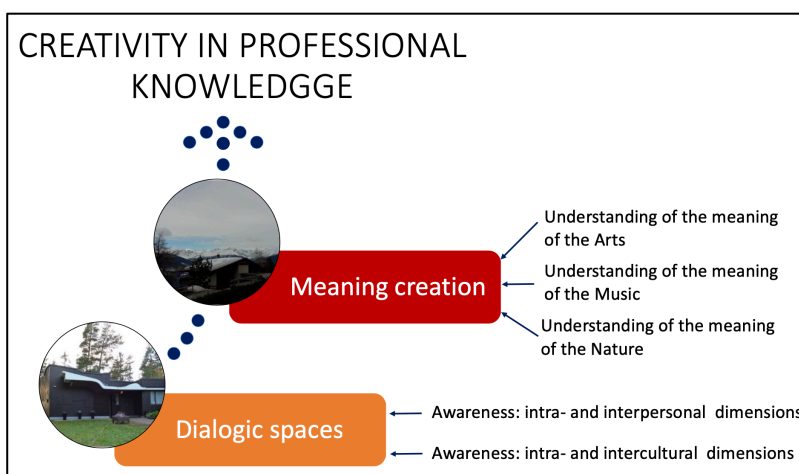


Figure 4. Constructing dialogue for creativity to foster professional knowledge development.

The variety of reflective tasks were recognized as dialogues leading to meaning creation and new understanding of theoretical knowledge on creative music teaching. Intrapersonal dialogue appeared to be regularly used by the students during the reflection phase. As explained by some students, a neglected part of their selves emerged through the dialogue with their peers or through the significance of aesthetic experiences confronted during the project. In this sense, intrapersonal dialogue appeared to be particularly meaningful in order to widen the student's experiential and metacognitive knowledge. The importance of task assignments is shortly being reminded of here:

- At the start of the journey, the stranger ("alien") dives into the reflection (e.g., seeks for definition of music in relation to silence, supported by intrapersonal and intracultural connections). Own presumptions and attitudes may prevent or limit the learning experience. S(h)e then focuses at her own experience, in a closed mode, listening one's own multisensory or domestic culture-oriented experiences, and learns about oneself.
- S(h)e aims to situate his own understanding of creative teaching in dialogue with the other, whose standpoint may be even bothering (e.g., the collective discussion about redefining creativity during the first week; or the feedback given in December 2015, or the second presentation in April 2016, with interpersonal and intercultural challenges)
- Intrapersonal, interpersonal, intracultural and intercultural experiences in different domains (nature, arts, own culture) created a deep root for their teaching, shown in their reflections more than music, however pointing out to the significance of experiences identically with musical speech with reference to tacit knowledge (Polanyi, 1966/1983) – the speech of silence was found, probably, as one of the most powerful factors for the students. It finalized a broader understanding of music teaching, to define the living experience of the other, the one that used to be the stranger (alien). The process was found to consequence in finding a new world, with observations to the world by the eyes of the other. This fosters the meaning making for pedagogical needs, as recreated and refreshed.

According to the study, it can be argued that meaning creation was strongly supported by experiencing the different dialogic spaces. During the whole project, these dimensions were constantly being intertwined, as shown in Fig. 5.

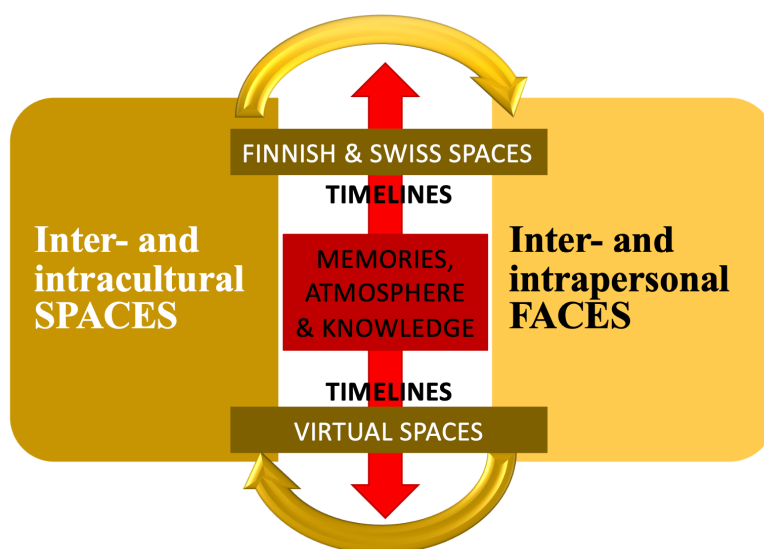


Figure 5. The interactions between the dimensions of the MDD model (faces, space, timelines).

An awareness of intra- and interpersonal dimensions, and inter- and intracultural dimensions helped students to comprehend their relation to creativity during their experiences in Finland and Switzerland, during both phases of the project. These were accessed better with the analytical choice of the MMD as a framework. The pedagogical exchange project may have led the participants to understand one's own culture through the eyes of the other. This supported the teaching performances in the directions of openness, encouragement, and confidentiality, to remember the meanings of multisensory experiences for creative spaces. The memories of certain moments with the surrounding atmosphere (timelines and spaces), and the feeling of being united despite the variety of cultural backgrounds (faces) was found especially important for the current needs, to be able to interpret the data collected from the lenses of music as a human resource, as explained in Marjanen (2021a).

Meaning making was grounded on creating an understanding of the meaning of the nature, meaning of music, and meaning of the arts. They were reflected via alienness, to confront another person, and another culture, and to access a new way of domestic cultural performances. Because of the real-life experience of the world through all the senses, in time, tacit knowledge of meaning creation was accessed, to understand the significance of open observations and multisensory experiences in time. This supports meaning making also with children.

6 Closing the circle: creativity is a teacher's resource for professional knowledge

The current intercultural exchange project, by the title PEERS, provided by HEP Lausanne, Switzerland, combined with LbD pedagogical support by Laurea UAS, Finland, was found out to provide the project process with a strong support, to understand the similarities and needs of teaching, despite the culture in question, and the richness of differences that everyone can benefit from.

Intercultural exchange was found out to create meanings especially when the condition of a deep-level, face-to-face access, and an emotionally supported connection with another person's world was provided. This led to the comprehension of the holistic nature of a human being, and the comprehension of a human being accessed as a part of the nature. We defined the philosophical approaches through music being a humanly-oriented capacity in the form of faces, spaces and timelines: music to exceed the limits of a musical work, to create musical communication. We can think of a man to breath musically throughout one's life. These kinds of sensitive experiences support the value creation towards human needs because the experience was so eloquent. Maybe we should consider how to access the dialogical, human-oriented, emotional spaces to support the arts-grounded speech in a man through education?

The experience of various dialogic spaces offered a ground for the development of professional expertise. The generalist teacher- and social service's students were challenged by creative music teaching and supported by the spaces created within the person/between the persons/ between the person and the 'world', e.g., objects, social practice like music making, and arts. The generating of knowledge was maintained by taking into account:

1. The philosophical underpinning: Responsiveness, as described in the phenomenological approaches to pedagogy, focused on the "in-between" as the space where learning (Künkler, 2011) and understanding occur; it was based on the anthropological approaches of relations (Stang, 2016), and the meanings of music as an approach and a holistic phenomenon (Marjanen, 2021a).
2. Multimodality of the dialogical process: beyond language, an added value can be reached by combining different kinds of communication and expression media, such as film/music/text. In the current framework these created multimodal tools for meaning creation (Marjanen, 2021a; Chatelain, Giglio & Moor, 2019).
3. Shared spaces of possibilities through common work phases gave essential inputs for the evolution of student's conceptions of creativity and music teaching. This was explained through the three dimensions of dialogue according to the Multisensory Musical Design (Marjanen, 2021a).

Subjective sense-making offers a process towards the development of professional knowledge. In the current case study, the intra- and intercultural, and intra-and interpersonal spaces were strongly present at the current processes, with a clear justification to state, that the dialogues between those, and fostered by them, offered a strong ground for subjective pathways towards development and recreation. Thus, Waldenfels' theory of otherness (2007) can be seen as an opportunity to encourage intra-and interpersonal dialogue. Spaces in a person, between persons, and persons outside, in external spaces, are real and function in a dialogical way. These experiences of the other cultures were seen as hitting the students, to be shaken by the strength of the experiences, to connect through Flow (Csikszentmihályi, 2008). The phenomenological approach of dialogue in terms of spaces, faces and timelines was found as a tool to understand what happened, of which the students' professional development can be found and recreated.

The current phenomenological approach underlines the potential of theoretical framing of personal experience in transforming one's knowledge. It was supported by the Multisensory Musical Design (Marjanen, 2021a). The encountering between foreign teacher students, being analyzed under the lenses of dialogue, initiated insights and stimulated individual and creative solutions. Teaching for creativity was experienced on the level of teacher training, with a double impact. First, we were able to experience a conceptual framework to open new perspectives for our practice as teacher trainers. Secondly, we were able to appreciate the added value of intercultural exchange, to open us dialogical spaces, as a tool for learning. The whole theoretical reframing of

the study provides us with a new theoretical input for generalist and specialist teacher training purposes, with contributions to foster creative and integrated music teaching tools in schools.

References

- Binkley, M., Erstad, O., Herman, J., Raizen, S., Ripley, M., Miller-Ricci, M. & Rumble, M. (2012). Defining Twenty-First Century Skills. In *Assessment and Teaching of 21st Century Skills*, edited by Patrick Griffin, Barry McGaw, and Esther Care: 17 – 66. New York: Springer. https://link.springer.com/chapter/10.1007/978-94-007-2324-5_2.
- Bocconi, S., Kampylis, P. G. & Punie, Y. (2012). *Innovating Teaching and Learning Practices: Key Elements for Developing Creative Classrooms in Europe*. eLearning Papers, 30. <https://doi.org/10.2791/90566>
- Brinkmann, M. (2017). *Phänomenologische Erziehungswissenschaft*. In *Pädagogik-Phänomenologie* (pp. 17-45). Springer VS, Wiesbaden.
- Brown, S. (2017). A joint prosodic origin of language and music. *Frontiers in Psychology* 8, 1894. Doi: 10.3389/fpsyg.2017.01894
- Bruner, J. (1996). *The Culture of Education*. Cambridge/ London: Harvard University Press.
- Burnard, P., & Murphy, R. (2013). *Teaching music creatively*. London: Routledge.
- Chamberlain, D. (1995). The psychology of the fetus. In S. Lebovici, R. Diatkine & M. Soule (eds.) *Traite de psychiatrie de l'enfant et d'adolescent* (2nd ed) 1, 263–279. Paris: Presses Universitaires de France (English version.)
- Chamberlain, D. (2003). Communicating with the mind of a prenat. *Guidelines for parents and birth professionals. The journal of prenatal and perinatal psychology and health* 2 (18), 95–108.
- Chatelain, S., Giglio, M., & Moor, M. (2019). Teacher Techniques for Talking with Students About Knowledge Mobilized During Creative Musical Productions. In E. K. Orman (Ed.), *Informing the Teaching and Learning of Life's Journey Through Music* (pp. 39-47). Dubai: Canadian University Dubai.
- Craft, A. (2005). *Creativity in schools: tensions and dilemmas*. Abingdon: Routledge.
- Craft, A., Cremin, T., Burnard, P. Chappell, K. (2007). Teacher stance in creative learning: A study of progression. *Journal of Thinking Skills and Creativity*, 2 (2), 136-147.
- Cremin, T. (2009). Creative teachers and creative teaching. In A. Wilson (Ed.). *Creativity in Primary Education* (pp. 36-46). Exeter: Learning Matters.
- Cresswell, J.W. & Plano, C.V.L. 2007. *Designing and conducting mixed methods research*. Thousand Oaks, CA: Sage.
- Csikszentmihályi, M. (2008). *Flow: The Psychology of Optimal Experience*. New York: Harper Perennial Modern Classic.
- Eisner, E. W. (2003). Artistry in Arts Education. *Scandinavian Journal of Educational Research*, 47 (3), 373-384.
- Finnish National Agency for Education. (2018) *National Core Curriculum for Early Childhood Education and Care 2018*. Helsinki: Finnish National Agency for Education
- Finnish National Agency for Education. (2014). *National Core Curriculum for Basic Education 2014*. Helsinki: Finnish National Board of Education.
- Friesen, N. (2014). Waldenfels' Responsive Phenomenology of the Alien: An Introduction. *Phenomenology & Practice*, 7(2), 68-77.
- Gess-Newsome, J. (2015). A model of teacher professional knowledge and skill including PCK. *Re-examining pedagogical content knowledge in science education*, 41(7), 28-42.
- Giacco, G., & Coquillon, S. (2016). On the process of sound creation: Some models for teaching artistic creation in music using a soundpainting project in a French primary school. *Visions of Research in Music Education*, 28. Retrieved from: <http://www.rider.edu/vrme>
- Giglio, M. (2012). Creating a “Space” for Class Discussion about Collaborative Creativity: The Point of View of Teachers. In *Twenty-fourth International Seminar on Research in Music Education*. Thessaloniki.
- Giglio, M. (2015). *Creative collaboration in teaching*. New York & London: Palgrave Macmillan.

- Godau, M. & Fiedler, D. (2018). Erfassung des Professionswissens von Musiklehrkräften. Validierung einer Deutschen Übersetzung eines Selbstauskunftfragebogens zur Erfassung des Musical Technological Pedagogical and Content Knowledge (MTPACK). In B. Clausen & S. Dressler (Eds.), *Soziale Aspekte des Musiklernens* (pp.185–205). Münster, New York: Waxmann.
- Gosselin, P., Fortin, S., Murphy, S., St-Denis, E., Trudelle, S. & Gagnon-Bourget, F. (2014). Référentiel pour le développement et l'évaluation de la compétence à créer en art au collège et à l'université. Repéré à <http://www.compenceacreer.uqam.ca>
- Gruber, H. (2019). Lesson study with music: A new way to expand the dialogic space of learning and teaching. *International Journal for Lesson and Learning Studies*,8(4), 272-289.
- Hannaford, C. (2004). Viisaat liikkeit: Aivojumpalla apua oppimiseen [The original publication in 1995: Smart Moves: Why Learning Is Not All in Your Head]. Translated by T. Salminen. Helsinki: Hakapaino Oy.
- Jeffrey, B. & Craft, A. (2004). Teaching creatively and teaching for creativity: distinctions and relationships. *Educational studies*, 30 (1), 77-87.
- Künkler, T (2011). *Lernen in Beziehung. Zum Verhältnis von Subjektivität und Relationalität in Lernprozessen*. Bielefeld: Transcript.
- Lage-Gómez, C., & Cremades-Andreu, R. (2019). Group improvisation as dialogue: Opening creative spaces in secondary music education. *Thinking skills and creativity*, 31, 232–242.
- Laine, T. (2010). Miten kokemusta voidaan tutkia? Fenomenologinen näkökulma. [How to investigate experience? A phenomenological view.] In J. Aaltola, & R. Valli (Eds.), *Ikkunoita tutkimusmetodeihin II* [Windows for research methodology II.] (pp. 26-44). PS-kustannus.
- Lippitz, W. (2007). Foreignness and otherness in pedagogical contexts. *Phenomenology & Practice*, 1(1), 76-96.
- Lubart, T., Mouchiroud, C., Tordjman, S. & Zenasni, F. (2003). *Psychologie de la créativité*. Paris: A. Colin.
- Mälqvist, M. (2015). Preserving misconceptions or a call for action? – A hermeneutic re-reading of the Nativity story. *Global Health Action*. 8. 10.3402/gha.v8.30386.
- Marjanen, K. (2021a). "Multisensory Musical Design: Views for Music as a Phenomenal Framework for Human, Phenomena-Based Education." *The International Journal of Arts Education* 15 (3): 15-47. doi:10.18848/2326-9944/CGP/v15i03/15-47.
- Marjanen, K. (2021b). Music: a capacity in education – interaction to serve human needs. *Academia Letters*, Article 2876. https://doi.org/10.20935/AL2876https://www.academia.edu/50834551/Music_a_capacity_in_education_interaction_to_serve_human_needs?source=swp_share
- Marjanen, K. (2009). "The Belly-Button Chord: Connections of Pre- and Postnatal Music Education with Early Mother-Child Interaction." PhD diss., University of Jyväskylä. <http://urn.fi/URN:ISBN:978-951-39-3769-0>.
- Marjanen, K. & Chatelain, S. (2016). The Peers Project: Integrated Music Education to Foster Professional Identity within the Framework of The Laurea Learning-by-Developing Model. In *Crossing Borders and Creating Future Competences*, edited by Teija-Kaisa Aholaakko, Kati Komulainen, Arja Majakulma and Susanna Niinistö-Sivuranta, pp. 80–88. <https://core.ac.uk/download/pdf/80992981.pdf>
- Mayer, R. E. (1999). Fifty years of creativity research. In R. J. Sternberg (Ed.), *Handbook of creativity* (pp. 449-460). Cambridge, UK: Cambridge University Press.
- Metsämuuronen, J. (2008, 4th ed.). *Tutkimuksen tekemisen perusteet ihmistieteissä* [Basics for performing research in human sciences.] International Methelp Oy. ISBN: 978-952-5372-28-1
- Parncutt, R. (2009). Prenatal development and the phylogeny and ontogeny of music. In S. Hallam, I. Cross & M. Thaut (Eds.) *The Oxford handbook of music psychology*. New York: Oxford University Press, 219-228.
- Polanyi, M. (1966/1983). *The Tacit Dimension*. Gloucester, MA: Peter Smith.
- Pullinen, J. (2003). Mestarin käden jäljillä: Kuvallinen dialogi filosofisen hermeneutiikan näkökulmasta [At the Tracks of the Master: Visual Dialogue from the Perspective of the Hermeneutical Philosophy]. *Taideteollisen korkeakoulun julkaisu A 40*: 25 – 26.
- Raij, K. (2007). *Learning by Developing*. Laurea Publications A 58. Retrievable <https://www.laurea.fi/dokumentit/Documents/A58.pdf>

- Raij, K. (2014). Learning by Developing Action Model. Laurea Publications 36. Retrievable <https://www.theseus.fi/handle/10024/114782>
- Regelski, T.A. (2021, Preprint). Musical value and praxical music education. 10.13140/RG.2.2.11819.57121. (Observed 12.11.2021).
- Repo, L., Paananen, M., Eskelinen, M., Mattila, V., Lerkkanen, M-K., Gammelgård, L., Ulvinen, J., Marjanen, J., Kivistö, A. & Hjelt, H. (2019). Varhaiskasvatuksen laatu arjessa – Varhaiskasvatussuunnitelmien toteutuminen päiväkodissa ja perhepäivähoidossa. Kansallinen koulutuksen arviointikeskus. https://karvi.fi/app/uploads/2019/09/KARVI_1519.pdf (Observed 12.10.2020).
- Russell-Bowie, D. (2012). MMADD about the Arts: An Introduction to Primary Arts Education, 3rd ed. Frenchs Forest, New South Wales: Pearson Education.
- Schön, D. (1983). The Reflective Practitioner. How professionals think in action, London: Temple Smith.
- Shulman, L. S. (1986). Those who understand: Knowledge growth in teaching, *Educational Researcher*, 15(2), 4–14.
- Sjöberg, M., & Nyberg, E. (2020). Professional Knowledge for Teaching in Student Teachers' Conversations about Field Experiences. *Journal of Science Teacher Education*, 31(2), 226-244.
- Stang, R. (2016). *Lernwelten im Wandel: Entwicklungen und Anforderungen bei der Gestaltung zukünftiger Lernumgebungen*. Berlin: De Gruyter Saur.
- Suomi, H. (2019). Pätevä musiikinopettamiseen? Luokanopettajaksi valmistuvan musiikillinen kompetenssi perusopetuksen opetussuunnitelman perusteiden toteuttamisen näkökulmasta. [Competent to teach Music? The Musical Competence of graduating Primary Teachers in Terms of the Implementation of the National Core Curriculum for Basic Education]. JYU Dissertations. <http://urn.fi/URN:ISBN:978-951-39-7765-8>
- Van Manen, M. (2017) Phenomenology and Meaning Attribution, *Indo-Pacific Journal of Phenomenology*, 17(1), 1-12, DOI: 10.1080/20797222.2017.1368253
- Vass, E., & Deszpot, G. (2017). Introducing experience-centered approaches in music teacher education—Opportunities for pedagogic metamorphosis. *Thinking Skills and Creativity*, 23, 1-16.
- Vass, E. (2019). Musical co-creativity and learning in the Kokas pedagogy: Polyphony of movement and imagination. *Thinking skills and creativity*, 31, 179-197.
- Vilkkä, H. (2014). Tutki ja havainnoi. [Investigate and observe.] <http://hanna.vilkkä.fi/wp-content/uploads/2014/02/Tutki-ja-havainnoi.pdf>
- Vygotsky, L. S. (1925/1971). *The psychology of art*. Cambridge, Mass: M.I.T. Press.
- Vygotsky, L. S. (1978). *Mind and society*. Harvard University Press.
- Waldenfels, B. (2005). Verkörperung im Bild. In R. Hoppe-Sailer, C. Volkenandt & G. Winter (Ed.), *Logik der Bilder. Präsenz - Repräsentation – Erkenntnis* (pp. 17-34). Berlin: Reimer.
- Waldenfels, B. (2007). *The Question of the Other*. Chinese University Press.
- Waldenfels, B. (2017). Leibliches Musizieren. In J. P. Hiekel (Ed.), *Body Sounds. Aspekt des Körperlichen in der Musik der Gegenwart* (pp. 28-43). Mainz: Schott.
- Wegerif, R. (2011). Towards a dialogic theory of how children learn to think. *Thinking Skills and Creativity*, 6(3), 179-195. <https://doi.org/10.1016/j.tsc.2011.08.002>
- Wenger, E. 1998. *Communities of practice: Learning, meaning and identity*. Cambridge University Press.