

This is an electronic reprint of the original article. This reprint may differ from the original in pagination and typographic detail.

Inspiring self-reflective dialogues through aesthetic learning processes: Learning by drawing

Karlberg-Granlund, Gunilla; Ahlskog-Björkman, Eva

Published in:

Developing a didactic framework across and beyond school subjects: Cross- and transcurricular teaching

DOI:

[10.4324/9781003367260-13](https://doi.org/10.4324/9781003367260-13)

Published: 22/12/2023

Document Version

Final published version

Document License

CC BY-NC-ND

[Link to publication](#)

Please cite the original version:

Karlberg-Granlund, G., & Ahlskog-Björkman, E. (2023). Inspiring self-reflective dialogues through aesthetic learning processes: Learning by drawing. In S. Harnow Klausen, & N. Mård (Eds.), *Developing a didactic framework across and beyond school subjects: Cross- and transcurricular teaching* (1 ed., pp. 131-143). (Routledge Research in Education). Routledge. <https://doi.org/10.4324/9781003367260-13>

General rights

Copyright and moral rights for the publications made accessible in the public portal are retained by the authors and/or other copyright owners and it is a condition of accessing publications that users recognise and abide by the legal requirements associated with these rights.

Take down policy

If you believe that this document breaches copyright please contact us providing details, and we will remove access to the work immediately and investigate your claim.

11 Inspiring self-reflective dialogues through aesthetic learning processes

Learning by drawing

*Gunilla Karlberg-Granlund and
Eva Ahlskog-Björkman*

Introducing aesthetic learning processes in schools

The concept of *aesthetic learning processes* refers to both rational knowledge and aesthetic expression, which can strengthen the complementary aspects of learning (cf. Karlsson Häikiö, 2016; Lindström, 2008, 2012). Our senses are activated through aesthetic learning processes. The word *aisthetikos* is Greek and means precisely the sensual, the perceptible (see Bale, 2009). This is the explanation for why aesthetics can be understood as a specific form of knowledge – perceptual knowledge – as we learn about the world through our senses.

Integrating and opening up aesthetic learning processes in schools and teaching is well in line with the aim to increase awareness and insights into the individual and the world around them. Wright (2010) proposed that what is special about aesthetic learning processes is that they provide children and young people with holistic meaning-making experiences which engage their bodies, hearts, and minds. Aesthetic learning processes contribute to learning through transformation by changing the way individuals think about their inner worlds and their relationships with the world (Sava, 1995). Individuals are exposed to different experiences through aesthetic learning processes that evoke their emotions and, hence, become meaningful.

The aesthetic forms of expression include dance, visual art, music, drama, movement, and poetry. Some of these are art subjects, including visual art and music, which exist as separate subject areas in basic education. The aesthetic forms of expression are used in schools and education in different ways, depending on the pedagogical goal the teacher is working toward. The major issue in arts education is aesthetic learning, where the “method of art” is expected to support in-depth learning not only in the arts, but across the curriculum. Lindström (2012) called this medium-neutral learning. When art is a subject, Lindström talked about medium-specific learning. However, art is often integrated into teachers’ teaching, even if they are not fully aware of its potential. According to LaJevic, it would be important to explicitly explore “the arts as a way to *make meaning* of students’/teachers’ lives and the world in general”

(2013, p. 2). The arts need to be more than a “coloring activity” in schools, instead of working to promote creativity and self-expression (LaJevic, 2013).

Lindström (2008, 2012) described how different aesthetic forms of expression can be related to learning through the following four perspectives: learning *about*, learning *in*, learning *with*, and learning *through* aesthetic learning processes. Learning *about* and *in* is about the acquisition of knowledge related to the art subject itself because the same goal can be achieved using different modes of expression and many different tools. Learning *with* and learning *through* opens for transcurricularity and integration (subject neutral). Aesthetic learning processes involve the attitudes and competences the learner can acquire through the deep engagement that different aesthetic projects can evoke.

The focus of this chapter is primarily on integrating aesthetic expressions and aesthetic learning processes with knowledge content from other subjects or subject areas. From this perspective, aesthetic expressions are used as a tool for learning other than knowledge within the art subject itself, here as an aesthetic method. The aim of this chapter is to discuss how aesthetic learning processes can support in-depth learning not only in the arts but across the curriculum as a transcurricular approach. We will explore a case study of teacher students’ experiences with drawing as a learning method, discussing the challenges and opportunities posed by using aesthetic processes for promoting reflection and learning beyond the arts.

Meaning-making and engagement always need to be part of teaching (Selander, 2017). Therefore, a subject teacher needs to develop the ability to see her field in a wider context and not just focus on the specific subject area. According to Selander (2017), learning objectives and learning situations that engage and create meaning can be about the following:

Community and interaction, the extent to which a subject area contributes to creating coherence and positive value for the individual, whether the subject area can contribute to perspectives on the self, and one’s own existence, and whether it can lay a foundation for a possible future.

(p. 104)

Østern et al. (2019) highlighted Selander’s (2017) emphasis on dialogue, interaction, space for action, participation, and affective aspects of learning and co-responsibility as the central aspects of a new understanding of didactics. According to Selander, dialogical voices provide opportunities for reflection and the exchange of ideas where meaningful learning situations can emerge. Similarly, the sociocultural perspective on learning emphasizes the importance of communication and that knowledge is mediated through communicative tools (Säljö, 2005). Vygotsky (1978) argued that both linguistic and physical tools are mediating. The different representations, both linguistic and physical tools, can be used alongside each other, and this mix is called multimodality (cf. Kress, 2009; Kress & van Leeuwen, 2001). This is also

illustrated in the new didactic design – oriented triangle developed by Selander (2017). Starting from the previous classic triangle where the teacher, student, and content are in different corners of the triangle, Selander placed the student and teacher in the same corner. In the second corner, distributed resources are placed, and in the top corner, the goals and curriculum can be found. By the distributed resources in the triangle, Selander (2017) referred to digital information and other resources, such as multimodal representations. The multimodal resources mean, as mentioned earlier, that communication can take place in different ways, such as text, images, or bodily expressions (cf. Kress, 2009; Kress & van Leeuwen, 2001). Expressions are closely linked to how culture and context provide frameworks for interpreting and using different expressions. Kress (2009) argued that meaning cannot be created unless the framework and tools are offered in the culture in question. The distributed resources teachers choose, according to Kress, become crucial for how pupils and/or teacher trainees are given opportunities for meaning-making and learning (see also Ahlskog-Björkman & Björklund, 2016).

Teachers' teaching is still important, but in aesthetic learning, we especially stress multimodal resources.

Empowering teacher students to use aesthetic approaches

To become empowered to use aesthetic approaches to learning, such as art, music, drama, dancing, moving, or poetry, in their future teaching, teacher students need to become acquainted with how aesthetic learning processes may deepen their own learning in teacher education. Professional growth and an awareness of emotions, needs, and values can be enhanced through reflection. Korthagen and Vasalos (2005) especially highlighted the importance of reflecting on core issues regarding identity and mission, aspects that are important for both experienced teachers and teacher students to consider.

Teacher educators are inevitably modeling how to use various teaching methods during teacher education (Lunenberg et al., 2007). Teacher students are watching *what*, *how*, and *why* teacher educators teach in particular ways (the classic “didactical questions”), probably thinking if they really “practice what they preach.” In our courses, we as teacher educators try to give examples of how to adapt an aesthetic and creative approach (see Ahlskog-Björkman, 2010; Björklund & Ahlskog-Björkman, 2018; Karlberg-Granlund, 2021; Karlberg-Granlund & Pastuhov, in press; Karlberg-Granlund et al., 2016). Teachers' – and teacher educators' – teaching methods, their beliefs about teaching and learning, and their relationships with their students inevitably affect the learning environments and potential for meaningful learning and creativity (Beghetto & Kaufman, 2014).

Our approach to learning emphasizes learning through a dialogue between students about the artifacts they have created, such as their self-made drawings, as well as dialogue with and through the artifacts themselves, which is in line with a sociocultural approach. We aim to provide students with active and

meaningful learning situations in which students can interact, communicate with each other, and, thus, deepen their learning. This is well in line with the perspectives presented in Chapter 3 of this volume about furthering personal development and *Bildung* by creating and opening possibilities for students to be autonomous, active, and reflective in creative processes with open and unpredictable outcomes.

By supporting teacher students to engage actively *with* and *through* various means in transcurricular ways (see Lindström, 2008, 2012 presented earlier), they become acquainted with diverse teaching and learning methods, exploring and developing their own qualities and competences individually and together with others. Preservice teachers, however, may have feelings of uncertainty in relation to the arts, which must be worked through because risk-taking and experimentation are important in teaching and learning practices. By having positive and even challenging learning experiences, their own learning deepens and broadens, which builds a solid foundation for their own future teaching.

Anderson et al. (2022, p. 2) highlighted the importance of “teaching for creativity” by giving the students creative opportunities and facilitating new connections in open-ended creative processes. In creative teaching, in turn, the teacher, together with her students, must tolerate the uncertainty that may arise and resist the implicit needs for control. Creative learning, though, helps the students “make and share new meaning about what they learn” (Anderson et al., 2022, p. 2; Beghetto, 2016; see also Chapter 10). Learning about learning and making learning visible are emphasized. We additionally propose that the teachers’ (in our case, teacher educators’) guidance becomes crucial in providing structure, clear aims, and concrete frameworks for the creative tasks, thus enabling risk-taking and meaningful learning within the learners’ zone of proximal development (Vygotsky, 1978).

Frameworks for a creative task: learning by drawing a good teacher, good teaching, and a good learning environment

As teacher educators, we continually learn from each other and our students, striving to connect our teaching to research. In an action research approach, we systematically document the intentions and aims of our courses and the outcomes and student evaluations to further develop and enhance our teaching. Eva, who came from the background of being a handicraft teacher, intended to connect all her courses to aesthetic learning processes, while Gunilla, who had the background of being a class teacher, was a generalist who wanted to create possibilities for meaningful learning where the students can learn from their practical experiences. Although we teach different courses, we have found a common interest in promoting teacher students’ reflection, dialogues, and learning through creative methods.

In this case study, we discuss how our teacher students have taken the challenge to deepen and broaden their self-understanding and views about being a teacher by making drawings of a good teacher, good teaching, and a good

learning environment, and engaging in dialogues with fellow students about their thoughts. This task was given to a large group of first-year teacher students in our different courses: in a general didactics course focusing on teachers' work in general and in a course about early childhood education (for children 6–8 years of age) in particular. The courses followed each other, having, however, a one-week practicum with an observation of teachers' work in schools in between.

The drawing task was given during lesson time, and the teacher students were provided with paper and color pencils. The students were invited to draw pictures about a good teacher, good teaching, a good learning environment, and then explain their drawings in texts. Then, they interpreted each other's drawings in dialogue in small groups of fellow students, focusing on what similarities and differences they noticed in their drawings and beliefs. Afterward, the students also answered a questionnaire about how the drawings and dialogues helped them to grasp and reflect on their own assumptions, along with how they experienced the working methods.

We have noticed that this small drawing task still has a large learning potential. Through the creative task, the students were empowered to become aware of their personal images of teaching and schools. The task encouraged them to reflect profoundly on their own experiences and remember their own time as pupils. By making drawings and becoming aware of what images they carried with them, they were supported to begin their own process of finding and creating their teacher identity during their first year of teacher studies. Becoming aware of one's own memories and life experiences is important because these may implicitly affect one's teaching (Korthagen, 2004; Murphy et al., 2004). Additionally, the task promoted reflection and dialogue about the implicit values and ideals of the group. Interpreting each other's pictures and sharing their reflections opened the teacher students to different understandings and helped them grasp something of the complexity of what it means to be a teacher. In the next section, we give some examples of how the students evaluated the creative task; here, we are primarily not interested in what the drawings look like, but rather in how the students experienced the task and how they portrayed their learning.

Student teachers' experiences of drawing

The following quotes come from the written evaluations after the teacher students made their first drawing (Moodle questionnaire in Didaktik I in autumn 2019, in total answered by 97 teacher students). Most of the teacher students concluded that both the drawing per se, and the interpretive dialogues were positive experiences, widening the teacher students' own perspectives and encouraging imagination:

It was a good exercise in terms of reflecting on what a good teacher, teaching, and learning environment should be. You also got more perspectives when we discussed our drawings in smaller groups.

It was fun and rewarding. I came up with more ideas when I first drew pictures and then wrote. It was also easier to explain my thoughts to others in the group when I had pictures to show.

It was fun but also a task where you had to think.

Fun and different. It was fun to use your creative side to display your thoughts.

I thought it was very instructive. I think you can explain several things at the same time with one picture.

It took a while to get started and know how to begin. It was also different in a good sense, with some activation and discussion. You also got new viewpoints from others in the class.

Some of the teacher students felt that it was a difficult task. Their experiences of the task seemed to interfere with their views about their competence to draw. Although the task was considered to be difficult, the students experienced that the given challenge was still able to be handled:

Drawing was difficult. A good teacher should be so many things, so I think it was difficult to get everything into a drawing. I'm not very good at drawing either, so that might be a reason why I think the way I do.

It was a bit difficult at first to get all the thoughts visualized, but it worked well once you got going.

A bit difficult when it's quite a broad "area," but we had all drawn quite similar drawings, so we were thinking quite similarly. However, it was a very "eye-opening" exercise when you had to interpret everyone else's drawings.

It was a bit difficult because I'm bad at drawing, and I don't get my idea of a good teacher drew as I liked, but it still went okay. It was nice because you must think a bit about it, how I want the school to be.

Drawing helped the teacher students really reflect on what a good teacher is like, recognizing that one can be a good teacher in many different ways:

It was a bit of a challenge, as there are so many good aspects to a good teacher.

A bit tricky, as there are so many similar ways you can draw it, but still I thought I got it well formulated and drawn in my picture.

Some of the students also perceived the creative and collaborative task as a good complement to the common ways of arranging university courses, where

the students may be more passive than active participants and textual tasks are usually given:

It is very nice and fun to do something practical in the studies because many parts of the studies are spent just sitting quiet and listening.

It was also a refreshing change to try to express your thoughts through drawings because much of the other studies involved expressing your thoughts in writing.

When the second course was also evaluated, the teacher students had been in schools to observe teaching. This affected their views on how they would like to be as teachers themselves and how they would arrange for good learning in a good learning environment. As the students compared their drawings from the two courses, they realized their own learning process:

[Now, I have] a broader view of what good teaching and a good teacher might be. The observation during my practicum broadened my knowledge.

You look more from the pupil's perspective, especially after the practicum.

Lots of things in the classroom, for example, cozy corner, computers for everyone, horseshoe in groups/pairs. Much more descriptive text now and new ideas.

Drawing and explaining presumptions when starting the studies in the first year enhanced the teacher students' observation capacities during practicum in schools. Visualizing what a classroom may look like beforehand prepared the students to better grasp all the different arrangements and relationships in a classroom when they would enter. They had already trained their pedagogical eye (Swedish: *att öva den pedagogiska blicken*) before coming to school. This process even helped the students to start building their own teacher identity, thinking of how they wanted to be as teachers.

Because you had to draw what immediately came to mind about what a good teacher/teaching/learning environment means, you draw what you think is most important. It made me think that these are the things that I intend to strive for as a future teacher.

You start to think a bit more about how you want to be as a future teacher, and you could also think about the teachers you have bad memories of – what a bad teacher is like.

The reflective work with the drawings also prepared the teacher students for the upcoming tasks of curriculum analysis and lesson planning.

Illustration of the reflective learning process of one student teacher

As teacher educators, we have used the drawing method in our courses from 2017 onward. In their first didactics course, the teacher students were asked to draw a picture of a good teacher, good teaching, and a good learning environment in general. The second task that is given in the second course focusing on early childhood education was then more concrete and personal because they drew a picture of themselves as teachers and explained how they would arrange a good learning environment and teach young children in particular. In the following example, one teacher student explains her reflective learning process and the two drawings:

How did you feel about drawing the picture of what a good teacher, good teaching, and a good learning environment is like?

- At first, I found it difficult, but after thinking about it and thinking through the task, it got better. It was fun to draw a personal drawing with your own thoughts.

How did the drawing help you develop your view?

- I started by writing down my answers to the questions, and then, using my answers made drawing easier. While drawing, you really got to think about how you think a teacher should be.

How did you connect your thoughts to your past experiences from your own time in school?

- I thought a lot about my own school experience. I thought about what kind of teachers and teaching I didn't really like or appreciate, and then, I thought about what I have appreciated and what was good. What I thought was good, I wrote down using my own experiences, as well as my personal opinions and values.

What did you learn from looking at other people's drawings and discussing?

- In my group, we had quite similar opinions, but everyone had something different from the others' pictures, which gave us more insight. It was a bit of an "aha experience."

This student had taken the challenge of thinking thoroughly through her own school time and memories, becoming aware of her own values. Thinking, writing, and drawing were intertwined. Then, seeing each other's drawings and discussing with other students in the small group broadened her own view, and she even explained having an enlightening experience, that is, an "aha experience." When then comparing her two drawings from different occasions, she did not recognize so many changes between drawings 1 and 2, even though we teacher educators may saw an immediate progression in the pictures (see Figures 11.1 and 11.2):

What are the differences between the picture that you drew in autumn and your new drawing that concerns preschool teaching? What progression do you see?

- Not much difference, but I have learned more about learning and school.

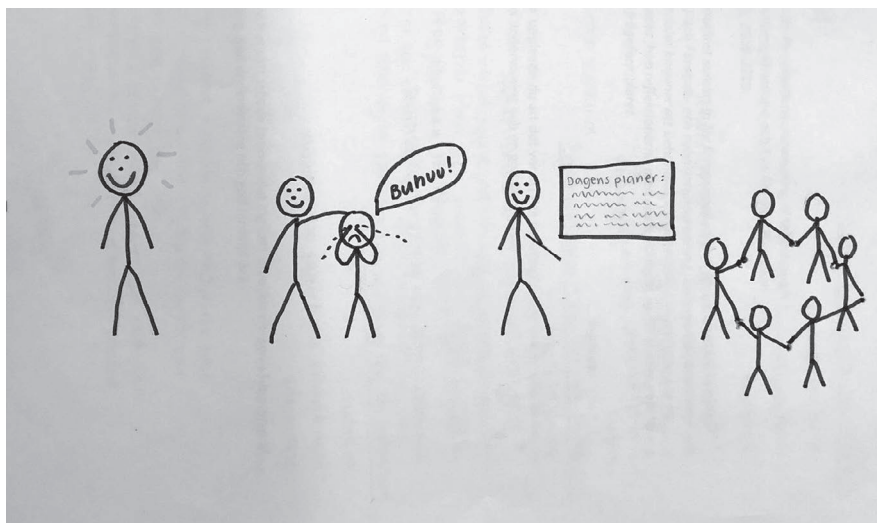


Figure 11.1 Drawing 1 by the teacher student (2018–2019).

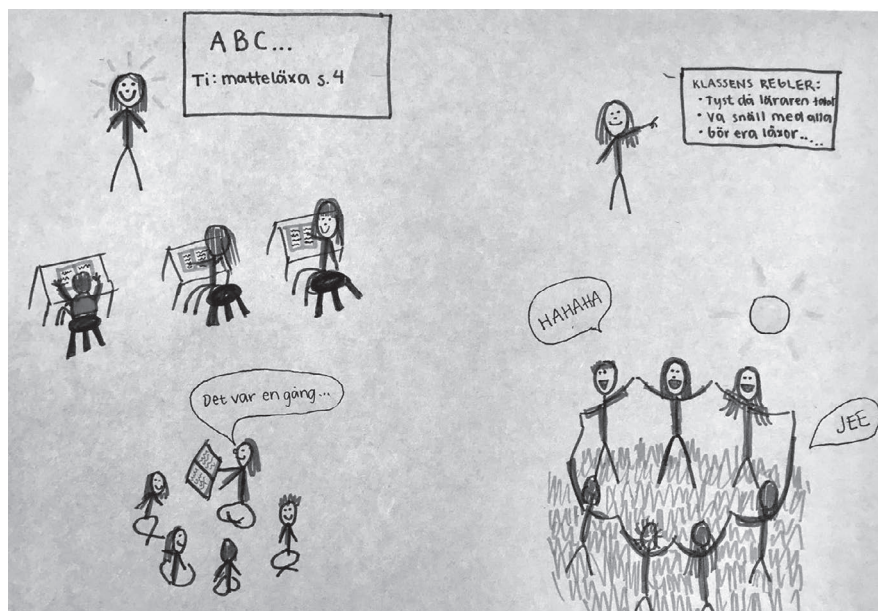


Figure 11.2 Drawing 2 by the teacher student (2018–2019, after the practicum).

Her uncertainty about progression between her pictures may illustrate the difficulties when drawing values. Even if she was not pointing out the changes in her pictures, she still knew she had made progress and wrote: “but I have learned more about learning and school.”

When drawing two times, we, as well as many of the teacher students themselves, notice that the second drawing becomes more complex. As in the aforementioned example, the second picture has more concrete equipment in the class, like desks, books, and text on the blackboard. There are a lot of things happening. A smiling teacher is pointing at the “rules of the class” (“*klassens ordningsregler*” in Swedish): “Be quiet when the teacher speaks, be kind to everyone, carry your homework.” One group plays or dances outside in a ring of pupils. Another group is sitting on the floor listening to a fairytale – “Once upon the time . . .” – and some pupils are working with math in their books; the homework is written on the blackboard. The teacher seems to be included in all these activities; she is engaging and communicating with the pupils in different ways. Both the pupils and teacher seemed to be happy, and the learning environment was peaceful and versatile. This idealistic view of what it means to be a teacher may not be in harmony with the reality that a new teacher will experience in schools. However, it is meaningful to become aware of what kind of learning environment and teaching one wants to achieve so as to work toward that aim.

Other examples of aesthetic learning processes

In the case study described earlier, we focused on making use of drawings to support teacher students’ self-reflective learning and dialogues about good education. We hope that this example can inspire other themes for reflection and interpretation through similar methods because using creative and aesthetic expressions and promoting aesthetic learning processes can be valuable in various contexts. For instance, in a transdisciplinary collaboration between the school subjects religion and art, preschool children were inspired to draw and talk about peace (Ahlskog-Björkman & Björkgren, 2018). The theme of sustainable development was investigated by craft education students from different Nordic countries through making figures in clay (Koch & Ahlskog-Björkman, 2021). In this volume, Chapter 10 gives an example of arts integration in literary education. Despite aiming at promoting aesthetic learning processes, drawing can also be used as a qualitative research tool, for instance, to identify children’s views about their learning environments (Mäkelä, 2018). Empowering children’s voices in planning the physical environment in schools is in line with the UN’s definition of children’s rights (United Nations, 1989).

Conclusions and future implications

Our experiences from this quite small drawing task are that the arrangements for the promotion of aesthetic learning processes do not need to be complicated. When providing good instructions and giving enough time to think

and reflect, this task is suitable for creative and reflective work in groups of students. By drawing with the traditional tools of paper and color pencils, the students were given time to work with their understandings and presumptions of teaching and schools. We introduced the drawing task in our courses in 2017 and continued developing this method during the pandemic, then also integrating the use of digital elements because the students could choose to draw on a computer or with the drawing material they happened to have at home. We, however, have noticed that the structural circumstances around the drawing situation, such as what equipment and materials the students have and how much time is given for the task, are critical. Drawing as homework may not challenge all the students to deeply reflect on their beliefs, but drawing during the lessons instead opens a space for creative work and for both individual and collective reflection.

By giving a similar drawing task in two different courses, we have created bridges between our courses. Parallel with the students' learning about themselves and teaching, we, as teacher educators, have also broadened our own learning about how to teach and support our teacher students. We have found creative and active learning approaches fruitful, especially with a focus on how aesthetic learning processes may enhance teacher students' learning and development. Our work has the inherent aims of giving teacher students experiences of aesthetic learning processes and encouraging teacher students to use creative methods themselves in their future teaching. Through our and the teacher students' learning processes, we have grasped something of the challenges and meanings of moving out from our comfort zones into new terrains, as LaJevic (2014) clearly expressed:

Engaging preservice teachers with the opportunity to take risks and venture out into uncertain spaces can help them move away from their comfortable art-as-doing activities and move into understanding art as a way of knowing, learning, and teaching.

(p. 14)

Teacher students and teachers need to be brave enough to try teaching in new ways. In this chapter, we have focused on drawing as a method for deepening and broadening learning and promoting self-reflective dialogues. Drawings may capture imaginations, and they are products one can go back to, feel, and see. Other forms of aesthetic expression may not have as concrete an artifact unless it is filmed and documented. Nevertheless, aesthetic methods as a transdisciplinary approach may promote holistic learning and meaning-making. Creating something personal involves engaging in ways that promote reflection and learning. This transdisciplinary approach needs to be further explored together with students and pupils of different ages in various contexts about deep questions. In aesthetic learning processes, pupils learn to know themselves and express themselves, as well as learn to understand others, which supports Bildung.

Empowering teacher students and teachers to use aesthetic methods in their work would also be an important aim for the future. Focusing on values and implicit images that guide our work may be useful not only for teacher students, but also for experienced teachers. We argue that taking the time to draw a picture of good education and reflect and discuss in a small group of pairs would be a sustainable strategy to explore the possibilities and challenges of everyday work in dialogue. Becoming aware of one's ideals and identifying potential constraints to reach that ideal is then a process of aesthetic learning guided by meaningful questions about who one is as a teacher and who one wants to become, here with the pupils' best in mind.

References

- Ahlskog-Björkman, E. (2010). Creating-with-textiles as an expression of visual communication in a learning context. In A.-L. Østern & H. Kaihovirta-Rosvik (Eds.), *Arts education and beyond* (pp. 183–212). Report 28/2010. Åbo Akademi University.
- Ahlskog-Björkman, E., & Björkgren, M. (2018). Barn och fred: En pilotstudie om förskolebarns förståelse av fred. *Norddidactica: Journal of Humanities and Social Science Education*, 4, 65–87.
- Ahlskog-Björkman, E., & Björklund, C. (2016). Communicative tools and modes in thematic preschool work. *Early Child Development and Care*, 186(8), 1243–1258. <https://doi.org/10.1080/03004430.2015.1085863>
- Anderson, R. J., Katz-Buonincontro, J., Mattson, D., Beard, N., Land, J., & Livie, M. (2022). How am I a creative teacher? Beliefs, values, and affect for integrating creativity in the classroom. *Teaching and Teacher Education*, 110(2), 103583. <https://doi.org/10.1016/j.tate.2021.103583>
- Bale, K. (2009). *Eстетik. En introduktion*. Daidalos.
- Beghetto, R. A. (2016). Creative learning: A fresh look. *Journal of Cognitive Education and Psychology*, 15(1), 6–23. <https://doi.org/10.1891/1945-8959.15.1.6>
- Beghetto, R. A., & Kaufman, J. C. (2014). Classroom contexts for creativity. *High Ability Studies*, 25(1), 53–69. <https://doi.org/10.1080/13598139.2014.905247>
- Björklund, C., & Ahlskog-Björkman, E. (2018). From activity to transdisciplinarity and back again – Preschool teachers' reasoning about pedagogical goals. *International Journal of Early Years Education*, 26(1), 90–103. <https://doi.org/10.1080/09669760.2017.1421524>
- Karlberg-Granlund, G. (2021). Att utveckla och utvecklas i läraryrket. In M. Uljens & A.-S. Smeds-Nylund (Eds.), *Pedagogiskt ledarskap och skolutveckling* (pp. 225–250). Studentlitteratur.
- Karlberg-Granlund, G., Granstedt-Ketola, K., & Axén, A. (2016). Lärarutbildare och lärarstudenter lär tillsammans. In K. Rönnerman, A. Olin, E. Moksnes Furu, & A.-C. Wennergren (Eds.), *Fångad av praktiken: Skolutveckling genom partnerskap* (pp. 241–264). University of Gothenburg.
- Karlberg-Granlund, G., & Pastuhov, A. (In press). Being, becoming, and sustaining: Learning professional learning in teacher education. *Professional Development in Education*.
- Karlsson Häikiö, T. (2016). Barns visuella lärande och grafiska framställning. In M. B. Karlsson & T. K. Häikiö (Eds.), *Bild, konst och medier för yngre barn. Kulturella redskap och pedagogiska perspektiv* (pp. 23–48). Studentlitteratur.

- Koch, M. D., & Ahlskog-Björkman, E. (2021). Social magi i håndværksfagene. *Techné Series: Research in Sloyd Education and Craft Science A*, 28(4), 179–192. <https://doi.org/10.7577/TechneA.4735>
- Korthagen, F. A. J. (2004). In search of the essence of a good teacher: Towards a more holistic approach in teacher education. *Teaching and Teacher Education*, 20(1), 77–97. <https://doi.org/10.1016/j.tate.2003.10.002>
- Korthagen, F. A. J., & Vasalos, A. (2005). Levels in reflection: Core reflection as a means to enhance professional growth. *Teachers and Teaching: Theory and Practice*, 11(1), 47–71. <https://doi.org/10.1080/1354060042000337093>
- Kress, G. (2009). *Multimodality: A social semiotic approach to contemporary communication*. Routledge.
- Kress, G., & van Leeuwen, T. (2001). *Multimodal discourse. The modes and media of contemporary communication*. Hodder Education.
- LaJevic, L. (2013). Arts integration: What is really happening in the elementary classroom? *Journal for Learning Through the Arts*, 9(1). <http://escholarship.org/uc/item/9qt3n8xt>
- Lindström, L. (2008). Estetiska läroprocesser om, i, med och genom slöjd. *KRUT, Kritisk utbildningstidskrift*, 133/134, 57–70.
- Lindström, L. (2012). Aesthetic learning about, in, with and through the arts: A curriculum study. *International Journal of Art & Design Education*, 31(2), 166–179. <https://doi.org/10.1111/j.1476-8070.2012.01737.x>
- Lunenberg, M., Korthagen, F., & Swennen, A. (2007). The teacher educator as a role model. *Teaching and Teacher Education*, 23(2007), 586–601. <https://doi.org/10.1016/j.tate.2006.11.001>
- Mäkelä, T. (2018). *A design framework and principles for co-designing learning environments fostering learning and wellbeing* [Doctoral dissertation, University of Jyväskylä]. https://jyx.jyu.fi/bitstream/handle/123456789/56703/978-951-39-7332-2_v%C3%A4it%C3%B6s27012018.pdf?sequence=1
- Murphy, P. K., Delli, L. A. M., & Edwards, M. N. (2004). The good teacher and good teaching: Comparing beliefs of second grade students, preservice teachers, and inservice teachers. *The Journal of Experimental Education*, 72(2), 69–92. <https://doi.org/10.3200/JEXE.72.2.69-92>
- Østern, T. P., Dahl, T., Strømme, A., Østern, A.-L., & Selander, S. (2019). *Dybdeling – en flerfaglig, relasjonell og skapende tilnærming*. Universitetsforlaget.
- Säljö, R. (2005). *Lärande och kulturella redskap. Om läroprocesser och det kollektiva minnet*. Norstedts Akademiska Förlag.
- Sava, I. (1995). Den konstnärliga inlärningsprocessen. In I. Porna & P. Väyrynen (Eds.), *Handbok för grundundervisning i konst* (pp. 35–61). Kunnallisliito.
- Selander, S. (2017). *Didaktiken efter Vygotskij. Design för lärande*. Liber.
- United Nations. (1989). *Convention on the rights of the child*. www.ohchr.org/EN/professionalinterest/pages/crc.aspx
- Vygotsky, L. S. (1978). *Mind in society. The development of higher psychological processes*. Harvard University Press.
- Wright, S. (2010). *Understanding creativity in early childhood*. Sage.