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Providing materials and spaces for the negotiation of meaning in explorative play:

Teachers' responsibilities

Biljana C. Fredriksen*

Abstract

This article aims to illustrate how both physical and social factors influence possibilities for children's learning (meaning negotiation) in visual art contexts in early childhood education. The main discussion relates to teacher's responsibilities in providing physical and social contexts for such meaning negotiations. The processes I wish to illustrate are complex and, in order to make them comprehensible within the scope of this article, only a few examples with interactions with the same girl, the same materials and the same teacher are chosen from a qualitative, arts-based study in a single Norwegian preschool. The purpose of the study was to understand how young children (aged 3-5) negotiate meanings while playing with tangible materials. The study showed that both the materials' qualities and the teacher's attitude to explorative play with the materials were important determinants of the content of the children's learning. In the presented examples, the teacher made materials available but did not pre-define the products that should be made. This allowed the girl to explore the possibilities and challenges that emerged from her experiences of the materials and tools. In line with the contemporary understanding that young children have right to contribute to curricula, as is required by the Norwegian Kindergarten Act, this article exemplifies the teacher's responsibilities for providing for children's contributions and for facilitating spaces for the negotiation of meaning between materials, children and teachers.

Keywords: visual arts, early childhood education, materials, intersubjectivity, meaning negotiation

Introduction and theory

Aims of the article

According to Eisner (2002), by selecting materials for students' activities a visual art teacher can provide possibilities for certain forms of learning to take place, but cannot decide what can be learned¹. This article shows examples of how a teacher's choice

of materials, as well as her understanding that she could not control what would be learned, provided a three-year-old girl with certain possibilities to learn through her experience with the materials.

It is usually assumed that planning a lesson should include determining the educational goals a teacher wants her/his students to achieve. However, it will seldom be possible for a teacher to pre-determine everything that might be learned, at least if we believe that teaching and learning are dependent on both what teachers and students bring to the contexts, as we do in a socio-cultural understanding of learning. Assuming that learning is not a one-way process, but a process of the mutual construction of meaning between teachers and students (Bruner, 1990), as well as between teachers, students and physical objects/materials (Lenz Taguchi, Moss, & Dahlberg, 2009), demands that the contributions of teachers, students and objects/materials are taken into account in pedagogical planning. If students are expected to take an active part in their learning, their contributions will influence the unfolding of the lesson and it will be impossible for the teacher to predict exactly what might happen. In addition, if the students are young children who, according to Egan (2007), have outstanding imagination, the unfolding of a lesson could be extraordinarily unpredictable. On the basis of my own planning and conducting of visual art activities with young children. this article suggests that a renewed understanding of the roles, responsibilities and attitudes of visual art teachers is needed in Norwegian early childhood, as well as in other contexts where children are seen as active contributors to the process of their learning.

In the Nordic kindergarten tradition, young children are seen as active co-constructors of knowledge (OECD, 2006). Under the Norwegian Kindergarten Act children are expected to contribute to the contexts of their preschools and their teachers are obliged to provide the conditions for such contributions (Ministry of Education and Research, 2005). This article suggests that the teacher's choices of materials for children's explorative play can both structure curricula (Fredriksen, 2010) and provide spaces for children's individual contributions, but only when the teacher's attitude allows such contributions.

In visual arts education, preparing a lesson usually includes planning the activities, materials, tools and types of products. Children are sometimes expected to copy products in an "imitative teaching style" (Bresler, 1994). Copying products can help them learn about certain techniques or aesthetic features, but copying is different from creating something from one's own ideas and experiences. In contrast, an "expansive teacher style", which is a "complex procedure drawing on the communication of sophisticated adult knowledge while respecting the child's current experience and interpretations" (Bresler, 1994, p. 101), does not rigidly pre-define children's product outcomes. As a visual art teacher who promotes an expansive teacher style, I consider both the process and the product to be mutually supportive and dependent on each another (Dahlberg & Moss, 2010). In this article I wish to focus on the process of

interactions between myself and a three-year-old girl where our joint attention was on hands-on activities with textiles.

When Elliot Eisner (2002), one of the most significant advocates of art education, argues that teachers' choices of art materials can influence their students' learning options, he claims that art materials with specific qualities have the capacity to provoke certain types of learning. The possibilities for learning depend on various attributes, including each student's experiences, interests, imagination and competencies. However, this argument does not suggest that it is only the qualities of the materials and the students' capacities that affect the learning process, and that the teacher's role is insignificant. On the contrary, all three are important and exist in a close relationship, similar to Aspelin's (2010) description of the close relationship between teacher and student as "radical intersubjectivity". That the relationship is close in this context means that children's learning process depends on immediate intersubjective communication along with the process, in addition to the quality of the physical context that was provided by the teacher prior to the interaction (Fredriksen, 2010, 2011a). This type of social and physical context is referred to here as a 'space for the negotiation of meaning'.

This article applies the concept "meaning negotiation" to diverse embodied activities during which personal meanings emerge and become expressed. By applying the concept of the negotiation of meaning, I argue that educational contexts are complex unities in which the negotiation of meaning depends on both physical contexts, the learners' and the teachers' "body-minds" (Dewey, 1925) (e.g., how they interact, use bodies in physical space, interact with physical objects, engage emotionally and imaginatively, and so on). When we view human body-minds as holistic, cognition is not separated from experience or imagination (e.g., as described in the theory of integrated cognition (Efland, 2002)). The negotiation of meaning is an active process where a child (or an adult) physically treats a material by pressing, grasping, lifting or pulling, in a social context. During such an experiencing process, children's present experiences can remind them of their past experiences and embodied knowledge. Further on, connections between their past and present experiences often result in the expressing of new and imaginative ideas, especially if some kind of problem was experienced during the material interactions (Fredriksen, 2011a). According to Dewey (2005 [1934]), the process of physical interaction is accompanied by and closely related to an inner "cognitive" process, although here cognition is understood as "imaginative cognition" (Efland, 2002) and not as an explicitly mental activity disconnected from experience, imagination or emotions.

This article is based on previous doctoral research in which young children's newly acquired understandings were found to be negotiated among three influences: the properties of the sculpting materials; the children's individual capacities (e.g., imagination, past experiences, interests and attention); and the teacher's professional and personal abilities (Fredriksen, 2011a). Presenting a few examples from doctoral

research in which I acted as the visual arts teacher of preschool children (ranging from 3–5 years old), I aim to illustrate mainly two responsibilities of a teacher in providing space for the negotiation of meaning: the selection of materials and an open-ended attitude to children's explorative play. More precisely, the article focuses on: a) how I chose materials with specific qualities; and b) how I facilitated one girl's open-ended exploration during her immediate, unpredictable interactions with the materials and myself. I am aware of that such a double focus might appear unnecessary and confusing, although I consider the two issues to be interwoven and mutually dependent. To illustrate this and narrow the focus of the article, vignettes with the same child (Eva, 3 years old), the same teacher (myself) and the same materials (textiles) are selected from a number of relevant vignettes.

The assumption that knowledge is not simply transferred from teacher to students but is negotiated among participants, objects, materials and spaces (Lenz Taguchi et al. 2009) significantly complicates our understanding of educational planning. If learning is influenced by the sum of the teacher's and students' previously acquired attributes, such as their understandings, attitudes, feelings, interests, experiences and imagination, as well as the qualities of the physical environment (including materials), a curriculum that is planned before a lesson cannot be considered as final; instead, curricula must be understood as a constantly changing process called "curricula-as-lived" (Irwin & Chalmers, 2007). From this perspective, it is impossible to clearly separate the three phenomena that simultaneously influence each another in educational contexts.

Both in the Scandinavian preschool model, and in the Reggio Emilia model which has inspired preschools in many countries, "there is child-centeredness endeavouring to make children's experiences, hypotheses, and ideas visible in preschools" (Sommer, Pramling Samuelsson, & Hundeide, 2010). The Reggio Emilia teaching style, which is similar to the "expansive teacher style" (Bresler, 1994), has been developed according to the local, political and cultural conditions in Northern Italy. However, when Norwegian preschool teachers are required to implement children's experiences, hypotheses and ideas into curricula, they have to develop appropriate ways to do this in the local conditions. With a focus on children's contributions to curricula, new questions about the teacher's role emerge: What is the role of the teacher in allowing children's active contribution to curricula? The emerging child-centeredness raises questions about the practice of pedagogical planning and teaching in different disciplines: What does it mean to view a child as competent in a concrete visual art education context? This article sheds light on a few of the challenges that concern the role of the teacher in contemporary early childhood education.

The impact of materials on the process of negotiating meaning

When Dewey (1925) writes about the unity of body and mind, he emphasises the importance of embodied experience in the learning process. In line with Dewey and

Gibson (1979), Howes (2005) more recently extends the body-mind concept to the "body-mind-environment" by arguing that the qualities of students' physical environments influence their learning processes. Human body-minds merge with their physical environments (Merleau-Ponty, 1994 [1945]). In addition, literature on the experiential dimension of learning views human-environment interactions as unavoidable (Stelter, 2008). Shusterman (2008) proposes that we can only know the world through our bodies and that young children exhibit a notable interest in knowing the world by exploring through the senses available in their bodies. In the context of this article (and the study it builds on), the tangible and visual qualities of materials and tools are especially relevant.

Young children appear to be tireless in their interactions with their environments as they constantly and curiously explore both their physical surroundings and the possibilities of their bodies (Merleau-Ponty, 1994 [1945]). In this study, children's encounters with the capacities and constraints of materials are considered extremely important for their new understandings. Experiencing diverse material qualities provides children with the opportunity to refine their aesthetic attention which is, among other things, essential to concept differentiation and cognition (Eisner, 2002; Smith, 1982). My research found that the resistance of materials is especially important to a child's ability to negotiate meaning (Fredriksen, 2011a). If a child uses a material and experiences something that does not work as expected, this new insight can trigger the child's imaginative connection between their past and new experiences (Dewey, 2005 [1934]), motivate creative problem solving (Fredriksen, 2011b) and allow the child to leave a "personal signature" on the problem solution (Eisner, 2002). Examples involving Eva will show how she negotiated with materials and tools, and how she imagined problem solutions in her own personal ways.

The impact of the teacher's attitude on the process of negotiating meaning

According to Dewey (1916, 1956, 2005 [1934]), experiences are holistic unities influenced by emotional, material, aesthetic and social qualities. In educational contexts, a child's experience will be influenced by a teacher, for instance by the power dynamics that always exists between an adult and a child (Clark, 2010). When the "expansive role" of an art teacher is practiced, the teacher respects the children's choices and becomes a co-constructor of their knowledge (Bresler, 1994). Such a relationship between a teacher and a child can be described as a "'pedagogy of listening', where the learner develops theories, shapes them with others, redevelops them in a pedagogy that emphasises the importance of relationships, listening (...) and avoiding predetermined results" (Dahlberg & Moss, 2010, p. xvii).

This article examines the way the teacher's visual arts competence and "listening attitude" toward young students influence two simultaneous and mutually dependent processes: 1) the teacher's improvisation process; and 2) the process of one child's

negotiation of meaning. Improvisation is understood here as a quick shifting of direction in educational practice (Dewey, 1938) which requires a high level of professional and discipline-specific competence from the teacher (Eisner, 2002). Rather than following a direction that a teacher had outlined for her/his students prior to a lesson, the children's learning processes emerge in complex, nonlinear ways, as described in the A/R/T-ographic methods of teaching and research (Irwin et al., 2006). The concept of A/R/T-ography will be explained in the methods section, although it should be mentioned here that the letters A, R and T denote artist, researcher and teacher, which are three roles adopted by a single person (i.e., an A/R/T-ographer) who teaches and conducts research at the same time.

In a discussion of Buber, Aspelin (2010) writes about the interhuman relationship between a teacher and a student (in my case, the student is a young child), which is a fragile and floating event that can neither be expected nor created: "it is an ontological reality"; a "basic existential condition"; a meeting "between two persons who recognise each other as unique" (Aspelin, 2010, p. 131). Aspelin (2010) suggests that the interhuman, immediate and unpredictable meeting between a teacher and a student affects the teaching process and that the focus of education (and educational research) should be directed toward such "momentary meetings". Such "momentary meetings" demand that a teacher (or a researcher) "stands in the fullness of life, in the midst of the world of living relations and shared situations" (Van Manen, 1997, p. 32). This article presents two momentary meetings as experienced from within their contexts by the author of this text.

Methods

This article is based on a qualitative, interactionist doctoral study with children ranging from 3–5 years old in an average Norwegian early childhood education and care (ECEC) institution. Throughout the autumn of 2009, I visited the ECEC institution three times a week. Sometimes I observed the children, and at other times I acted as an early childhood teacher. The data were collected from my own interactions with the children; the ECEC teachers employed at the institution were not significantly involved. Further, because the study focused on momentary meetings the characteristics of the ECEC institution did not significantly affect the results of the study.

The research design was developed according to a large number of ethical challenges and considerations, both related to the ECEC teachers and the children. For instance, the choice not to observe the teachers in action but conduct the activities with the children myself was taken because the teachers were not comfortable. In addition, the fact that I interacted with the children made *me* (and not the ECEC teachers) ethically responsible for all kinds of expressions (words, facial expressions etc.) that could influence the children's experiences. In the momentary meetings, ethical considerations could not be separated from the pedagogical choices and the interhuman relations.

I prepared and conducted nine educational contexts, each of which included two children. Each educational context lasted for approximately one hour and could be assigned to the area of visual arts education because we were addressing sculpting materials. However, unlike a typical visual arts lesson, these educational contexts were not directed at the production of objects. Both the teaching and research activities primarily focused on the unfolding processes of the children's explorations of materials and the unpredictable, ever-changing relationships among the participants (Aspelin, 2010).

The methods used in this study were chosen in accordance with its purpose, which was to develop an understanding of the processes through which young children negotiated meaning. The study did not aim to measure the children or compare them. Instead, this study focused on the strategies the children used to negotiate meaning. Both during the data collection and the analysing process each child was viewed as a competent individual with a unique background and unique experiences, as requested in the Norwegian Framework Plan (Ministry of Education and Research, 2006) and suggested by Clark (2010), Bresler (1994), Dahlberg and Moss (Dahlberg & Moss, 2005, 2010) and others.

When I positioned myself within the educational contexts I could obtain a closer perspective on the children's experiences and better grasp their processes. Interacting with the children myself, I acted as an A/R/T-ographer by combining my roles as an artist, researcher and teacher (Irwin & De Cosson, 2004; Springgay, Irwin, & Kind, 2008). In this type of arts-based qualitative inquiry, the researcher's subjectivities are welcomed and considered as tools for understanding complex realities (Stake, 2010). The interactionist position (Järvinen & Mik-Meyer, 2005) allowed me to study my experiences in living with the children and to thereby access the complex processes through which the children negotiated meaning (Van Manen, 1997). That is, I experienced the way my attention, attitudes and assumptions were challenged during my immediate meetings with the children.

During the period of data collection, I was mainly engaged in three types of activities. First, I observed the children's activities indoors and outdoors, especially when they played with sand, sticks, blocks and similar materials. Second, on the basis of these observations and my discussions with the ECEC teachers, I planned educational contexts with suitable sculpting materials. Third, I conducted nine educational contexts (cases) which were filmed with a fixed video camera and later analysed with NVivo software.

The video data were first analysed in the manner of multiple case study analyses where the similarities and differences among cases are investigated (Stake, 2006) and a number of themes and issues emerge. The second phase of the analytical process consisted of a contextual analysis of a few selected events. The short events (or momentary meetings) were presented in the form of vignettes and analysed in the manner of arts-based educational research (Barone & Eisner, 2006; Bresler, 2006a,

2006b; Eisner, 1991; Finley, 2005, 2008). Similarly, two brief events are selected for this article.

Presentation of the data

The events presented here are taken from the same case where two three-year-old girls played with textiles. The first vignette comes from an observation prior to the educational context and explains my choice of materials for the educational context with the same girls.

The other vignette presents an event that occurred during my interactions with the girls in the educational context. Among many similar events, the two interactions with the same girl, Eva, are selected for this article because they have much in common with other events involving three-year-old children. However, my interactions with Eva were especially intense, probably because I struggled to understand her speech; I had to be extremely attentive when listening to her words and had to immediately interpret her speech to act in accordance with the momentary contexts. This is probably why my experiences of interactions with Eva were extraordinarily intensive and memorable, and I find them suitable for this article that addresses my roles in interhuman, immediate and unpredictable meetings with the child (Aspelin, 2010).

Observation that led to the choice of materials

On one of my early visits to the ECEC, I observed two girls who I called Marit and Eva. Marit was pushing a doll carriage and struggling to walk in the adult-sized high-heeled shoes she was wearing. I addressed her:

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"Lovely shoes, but do they fit you?"
"Yes, they do!" she replied.
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I was a little surprised by her answer but tried to understand. Perhaps the shoes fit her in a different way rather than being the right size?

"Oh, yes...they match the colours on your dress very well," I suggested.

Marit immediately stopped the carriage, lifted one foot closer to her checked dress (orange, red, pink and violet) and started to compare the colours with the shoe until she found the same shade of pink.

I was sitting on the floor while I was talking to Marit and I barely noticed when another girl, Eva, approached me with a book in her hands. She simply sat on my lap and opened the book:

"Can you read to me?", she said.

I started to read and point at the illustrations. There was a picture of a pirate. She said something about the pirate, but I did not understand her. Somewhat embarrassed that I did not understand, I tried to continue the conversation:

"He has the same jumper as yours!", I said.

Eva pulled her jumper down to the page and confirmed:

"Yes, it is the same!" "And he has the same trousers as yours!", she added.

She was right: my jeans were the same colour as the pirate's trousers.

This observation gave me the idea of arranging an educational context in which the two girls and I could explore textiles. From the girls' perspectives, colour appeared to be the most significant quality of the textiles. To help them become more attentive to the colour nuances and other qualities of the textiles, I decided to introduce diverse textile qualities but in the same colour - all could be placed within the same colour category (pink) but had many different shades and nuances. Further, to provide them with the opportunity to acquire diverse sensory experiences and refine their aesthetic attention (Eisner, 2002), I chose textiles with diverse fabric qualities, surface textures, thicknesses, elasticity, and transparency as well as textiles that had been manufactured in different ways (e.g., woven, felted, knitted and chemically shaped). Exposing the girls to a large variety within one visual category, but with a small variation, could challenge the differentiation of their senses, which could also provide a basis for their concept differentiation (Eisner, 2006). However, because the negotiation of meaning would depend on the girls' past and present experiences, I could not know in advance which textile qualities would have a significant influence on their processes of negotiating meaning.

Eva's crown

One of the activities that developed during the educational context was the tearing of the textiles. This activity emerged from the girls' attempt to pull off small protruding dots from a felted, woollen textile. The girls observed that the dots were "stuck to the textile" and impossible to pull off and Marit declared that she was "clever at taking them of". At this point, I found two pairs of scissors in my bag and gave them to the girls. Even with scissors, they struggled to take the dots off and they started to combine cutting and pulling as if they wanted to tear the textile. I then introduced a thin cotton textile which was woven and easy to tear.

When Eva tore the textile for the first time she pulled hard with both arms without any help from me. She was excited and her joy of mastering was expressed through laughing with her whole body. After successfully tearing the cotton textile, the girls continued to explore other textiles' ability to be torn. During the activity of stretching and pulling they could discover that different textiles yield different types of resistance. The following event occurred approximately half an hour after the girls had started to tear textiles:

With scissors in her hands, Eva wanted to cut a piece of paper-like textile to make a crown for herself. I observed that the piece she was holding was the last piece of that textile large enough to be used for her crown, but she insisted on cutting it herself. I suggested the direction she could cut to avoid spoiling the only remaining piece, but she had already made up her mind about where to cut, and she continued to cut with confidence. When she was finished, she said proudly:

"I made it!"

Intending to transform the textile piece into a tubular shape, she used masking tape and managed to create a form similar to a crown. But the tube came out very small, about doll-sized. When she realised that the crown was too small for her head, she suggested she could take another piece of the same textile and try to make a large tube out of it. I knew that none of the remaining pieces were large enough for a crown that would fit her head but, instead of telling her that, I took the largest piece of textile and tried to wrap it around her head. We could both see that the piece was too short for a crown. She looked disappointed but soon had a new idea:

"That there – we can make it! We can make it!!" she said happily while pointing at the measuring tape.

I used the measuring tape to measure the distance around her head and then I measured the textile. I compared the two lengths in front of her and explained to her that the measured length around her head was longer than the textile, which meant the textile was too short. Eva now took the measuring tape into her own hands and started to stretch it:

"We can stretch!" she suggested, as if stretching the measuring tape could help us solve the problem of the too-short piece of textile.

I was afraid that Eva would be sad or angry when she realised that all pieces of that textile were too small. She was silent and seemed worried for a few minutes, but later had an idea to tape a few textile pieces together so that she could finally make a crown for herself.

Analysis and Discussion

The first vignette shows my interactions with the girls before I knew they would be joining me in an educational context. It was actually this observation that inspired my

imagination and contributed to my choice of pink textiles for the educational context with them. One could say that they indirectly contributed to the future content of their curriculum; however, the exact choice of the materials' qualities was my responsibility. It was through the momentary meeting with the girls that I experienced their acceptance and invitation to interaction. At the same time, my questions about the shoes and the colours seemed to be interesting for them, which further contributed to the establishment of our positive contact.

The first meeting between myself and the girls, presented in the first vignette, was not planned but occasional. The second vignette is from the educational context where the physical space, materials and tools were prepared for activities with textiles. When the girls entered the room, the textiles were not all visible at once. Instead, the textiles were hidden under the table and presented to the girls when I assumed the timing was correct. The scissors were introduced when Marit mentioned them. Similarly, I quickly grabbed a suitable textile from under the table when I sensed that the girls needed a textile appropriate for tearing. From my experience with dress design I knew that felted wool was impossible to tear, and I wanted the girls to experience mastery during the activity of tearing, which was new to them. It was possibly the merging of my roles of a teacher, researcher and artist (in my position as A/R/T-ographer) that allowed the immediate choices of appropriate textiles (Irwin & De Cosson, 2004) when quick decisions had to be made during the improvisation process (Eisner, 2002) in the momentary meeting (Aspelin, 2010).

The girls were not exposed to all of the materials at once. They had time to pay attention to each textile's specific qualities and, after a while, experience the diversity of qualities by treating them with their hands, wrapping them around their bodies. pulling, stretching, cutting... Having more textiles under the table, I could always renew their motivation by surprising them with something that could draw their attention. On one hand, I controlled the materials and could decide which materials to introduce. On the other, I was flexible in introducing the materials I evaluated to be suitable in the specific moment. In this sense, my attention to the girls and the listening attitude (Dahlberg & Moss, 2010; Vecchi, 2010), which determined my choice of suitable materials and tools, was both a means of controlling the pedagogical situation and an expression of respect for the children's needs and choices. As the provider of materials, I became a co-constructor of their knowledge (Bresler, 1994), but I could not determine exactly what would be learned in the context (Eisner, 2002). The girls' new understandings about how to pull when tearing, how much muscle power different textiles demanded, how textiles have diverse qualities concerning their texture, elasticity, thickness, transparency and so on, were negotiated through their physical activities but also through our interhuman relations (Aspelin, 2010). From my body language they could understand that I did not wish to constrain their interest to explore the materials. The fact that I let them tear and cut the textiles by themselves seemed to signal that their ideas were welcomed, and during the educational context they seemed to become more and more self-confident about their own mastering.

Curricula-as-lived emerged within the space for meaning negotiation which was delimited by my choice of materials and tools, but was still open-ended because I had not pre-decided the activities or outcomes. Curricula-as-lived developed in accordance with the unpredictability of the immediate meetings (Aspelin, 2010) between the girls, the materials, tools and me.

When I was planning the educational context I could not know that we would tear the textiles. The girls contributed to the activities by pulling the textiles, which I interpreted as possible development of the curricula-as-lived. Exploring textiles' elasticity and strength was during the momentary meeting defined as visual art curricula. The tearing activity that derived from our mutual interpretations became of the most important activities of the educational context. I suggest that Eva's ideas about solving later measuring problems were closely related to her experiences during the tearing activities – I will soon explain why I believe this.

At one point, the girls had the idea to make crowns for themselves. It is impossible to know where this idea came from, although during the educational contexts birthdays and princesses were mentioned a few times, and in Norwegian pre-schools birthdays are often celebrated by making a crown for the child who has a birthday. I suppose that making a crown was an activity the girls were familiar with and which corresponded with the pink textiles and dressing up, which was also one of their activities.

When Eva started to make her crown, her crown-making process uncovered a number of emerging problems that needed to be solved: how to cut with scissors, where to cut, how to join with tape, how to make a tube and so on. First of all, she had to face the challenge of choosing an appropriate textile for the crown. During the educational context Eva had lifted, stretched, torn and covered her body with different textiles and experienced their affordances. Indeed, I suppose that Eva's choice of the stiff textile was not a coincidence, but the result of her new knowledge about this material's affordance to stand upright – no other textile from the selection was able to be formed into a tube that could stand on its own; the other textiles she had tried on her head took on the form of her head, and this was not an appropriate design for a crown. In fact, I suggest that the idea to make a crown derived exactly from the affordances of the paper-like textile. Eva's past experiences from crown-making activities in her preschool merged with her new experiences of the pink, paper-like textile. The past and new experiences met in a new idea (Dewey, 2005 [1934]) with her personal signature (Eisner, 2002). I supposed that the idea to make crowns was motivated by the girls' associations about princesses and birthdays that developed during the play with the pink textiles.

Another challenge for Eva was holding the scissors and cutting straight, which she conducted with great patience and precision. Unfortunately, this was not good enough – she cut the textile in the wrong place. When she realised the textile was too short,

her imaginative cognition seemed to provide her with a number of possible solutions. I can of course not know what was taking place in her body-mind, but I interpret her ideas in relation to her activities and expressions I observed during the educational context. Studying the video footage, I can see clear connections between Eva's physical activities with the textiles and her suggestions about how to make the textile longer. Her embodied explorations of the materials supported her inner processes (Dewey, 2005 [1934]; Shusterman, 2008).

When Eva discovered that the textile was too short, she first suggested we should use the measuring tape to measure the textile. This idea implies that the activity of measuring had a meaning for her. This is possibly something she understood when the girls had earlier in the educational context argued about a textile they both wanted, and I measured it in order to cut it into equal pieces for each of the girls. By the time Eva suggested measuring, she had obviously understood that measuring is an important activity which can solve some problems; however, her suggestion to measure came too late, after the textile had already been cut. The measuring could not help us at this point.

Then she proposed that we stretch the measuring tape. However naïve, this suggestion signifies the engagement of her imaginative cognition (Efland, 2004). During the educational context, she had experienced the elasticity of diverse textiles. Many of them were flexible which made it possible to lengthen them by stretching.

Eva did not understand precisely how measuring should be performed but she tried to negotiate own understanding about the relations between the circumference of her head, the length of the measuring tape, and the length of the textile. When we consider that the girl was only three years old, we can imagine how complicated this mathematical understanding could have been for her. Her idea that the measuring tape could be stretched was a reasonable suggestion that indicated her experience that some textiles can be made longer by stretching. Although she mistakenly suggested stretching the measuring tape and not the textile, I suppose that this idea was a result of her meaning negotiations during her physical treatment of the textiles. Her bodymind merged with her physical environment (Merleau-Ponty, 1994 [1945]) and her negotiation of meaning emerged in the momentary meeting where she had a chance to experience, try and fail.

The difficulties with the length of the textile, instead of demotivating her, actually seemed to initiate her further struggle to achieve what she wanted (a crown for herself). And when some of the solutions to make the textile longer did not work, her imaginative connections between past and present experiences did not stop, but she continued to negotiate new possibilities, for instance how to assembly the textile pieces... but that is another story.

When Eva and Marit decided to make crowns, the character of the activities changed from play with the materials to the production of crowns. I had prepared to focus on the process, and when the girls started to make crowns I felt insecure about how much to help them with the number of emerging challenges. When Eva was cutting the textile, I struggled not to interfere and help her too much. I wanted her to make own decisions about the crown and learn through her experiences. Thus, I experienced how difficult it was to resist helping her: it would have been much easier for both of us if I had taken her scissors and shown her how 'things should be done' but, if I had done so, I would have prevented her from learning from her own experiences. In addition, I would have shown her that I knew better and by doing so suppressed her feeling of being competent.

From my (i.e., the teacher's) point of view, one of the most significant problems in Eva's crown making was the size of the textile. It was indeed Eva's decision to cut it that made it too small. I warned her of this possibility, but when I realised how determined she was to cut it her own way, I let her do so. Nonetheless, I had a difficult time watching her 'destroy' the last piece of textile that was long enough. I was afraid she would be sad if she had cut the textile and then realise afterwards that she might not be able to make a crown.

Giving children time to explore, face challenges and solve problems should be an easy pedagogical task. I am therefore surprised how hard it was for me to carry out such a simple task of not helping too much. During my interaction with Eva, I had to restrain myself from intervening, while I remained attentive and supportive, as practised in flexible purposing (Dewey, 1938) and improvisation (Eisner, 2002). As a tool in the interactionist (Järvinen & Mik-Meyer, 2005) and A/R/T-ographic research (Irwin & De Cosson, 2004; Springgay et al., 2008), my subjective, emotional engagement helped me become aware of my preconceptions that, for instance, wasted material and time should be avoided and that it is more effective (or socially acceptable?) to help children with practical tasks than to let them do things themselves. However, when I abstained from helping Eva, she was able to feel competent: by letting her do things herself I showed her that I respected her choices and that she was competent because she did not need my help. Letting her cut as she wished required me to relinquish some of my power (Clark, 2010), but doing so also allowed her to face a number of challenges and learn through her experience. Fortunately, instead of making her angry (although she looked worried for a minute), cutting her own way seemed to make her more self-confident; when she suggested that we use the measuring tape, she expressed her confidence by shouting: "We can make it! We can make it!"

Conclusions

This article is based on Eisner's suggestion that a teacher can, by selecting materials, make certain kinds of learning possible, but cannot decide what will be learned (Eisner, 2002). Through practical examples from one girl's interaction with pink textiles, with another girl and myself, I tried to illustrate the complexity of process of meaning negotiation and make visible how both the qualities of the materials and of the interhuman relations simultaneously conditioned which meanings could be negotiated.

During my interactions with Eva, I experienced how *her* experiences depended on my discipline-specific knowledge, attitudes and ability to listen. We were intersubjectively connected – she could grasp my attitudes from my body language, words and facial expressions. As a teacher and researcher, I needed to be attentive to the emerging events and unselfishly apply all of my imagination and competencies in response to the momentary meetings (Aspelin, 2010; Bresler, 2006a). Through my "lived experience" (Van Manen, 1997) as an A/R/T-ographer, I came to understand how I needed to balance my responsibilities, power, imagination and diverse competencies in order to provide for challenging and meaningful spaces for Eva's negotiations of meaning.

Selecting materials with suitable affordances and constraints is one of the main tasks of a visual art teacher (Eisner, 2002). A visual art teacher needs to apply their discipline-specific knowledge about materials, tools and techniques prior to lessons, although when the materials are chosen they can provide a framework within which curricula can be negotiated (Fredriksen, 2010). Apart from choosing materials, this article suggests that teachers need to facilitate spaces for open-ended curricula where new meaning can be negotiated according to each student's personal combination of experiences. If children are to negotiate personal meanings, teachers must allow open-ended explorations of materials instead of making models for the children to copy (Danko-McGhee & Slutsky, 2009). Perhaps most importantly, children's imaginative suggestions must be respected. When Eva was encouraged to experience and interpret the materials in individual ways, she could sense that she was recognised as a unique individual. According to Aspelin (2010), such recognition in interhuman relations is essential to education: "What really matters [in educational research] is between, in a lived relation, and nowhere else" (Aspelin, 2010, p. 132). This article has provided examples that demonstrate the ways in which it matters.

Notes

1 The concept of learning will later be compared with the concept of meaning negotiation. To avoid confusion, the concept of learning will be applied at this point, also because Eisner uses that concept.

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