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Narrative Strategy

Online teaching in arts and crafts

ABSTRACT

The subject of arts and crafts in teacher education, when taught online in real time and not face-to-face, has different prerequisites for the creation of motivation, engagement and participation in student groups. The form of instruction also needs to be different from that used in traditional classroom teaching to create and maintain good communication with the students and follow up on their academic work and learning. This article presents a study that used pedagogical action research as a method to examine teaching in two different student groups. Specifically, a narrative strategy was used. A narrative strategy, in this context, is an appropriate use of narrative in order to improve the subject-didactic arrangement in and around online education. I started the academic year by presenting the students with various challenges and possible solutions related to my own artistic development work with the aim of developing a common platform as a starting point for motivation for, participation in and communication about creative work. Observations of the different phases of the teaching process showed that the students developed their academic communication skills and their understanding of how learning relates to creative work. I find reason to link these positive experiences to the application of narrative strategy and discuss this strategy in relation to Bruner's and Bandura's theories of discovery learning and modeling.

Keywords: teacher education, arts and crafts, online teaching, narrative strategy

INTRODUCTION

Online teaching of arts and crafts in teacher education

The Notodden campus of the University of Southeast Norway (USN) has, for the past two decades, focused on the development of online teaching opportunities within teacher education. This educational institution was among the first in Norway to offer online education at this level, a move that was described as pioneering nationally. Online courses, combined with physical gatherings on campus, are attractive to students. Spring 2020 figures from National Coordinated Admissions showed that the total number of applicants to USN was 8,887; 2,001 of these, nearly 18%, were for online studies. These numbers show that online studies play a significant role in USN's study portfolio.

The result of USN's prioritization of the development of both digital infrastructure and digital teaching competence among staff was of great importance when the COVID-19 pandemic led to the closure of all Norwegian educational institutions on 12 March 2020. From this date onwards, online teaching replaced classroom teaching, and the spring exams were conducted digitally.

Digitalization has affected and changed society in many ways. In teacher education, we have, in recent decades, also observed a focus on the use of information and communications technology (ICT) in learning. Development of digital competence was already described in the *Læreplanverket for Kunnskapsløftet 2006* curriculum (Kunnskapsdepartementet, 2006) as one of five basic skills to be targeted in school activities, which is also reflected in the guidelines for primary and lower secondary teacher education (GLU) (Kunnskapsdepartementet, 2010a, p. 9; Kunnskapsdepartementet, 2010b, p. 9). Basic ICT skills has posed challenges for teacher education institutions in terms of understanding what they are, how they should be implemented in the educational offerings and how to divide academic responsibilities.

The five basic skills are maintained in the curriculum *Læreplanverket for Kunnskapsløftet 2020* curriculum (Kunnskapsdepartementet 2017; Kunnskapsdepartementet, 2019). Within the higher education sector, demands for the use of digital technology have revolved around a qualitative digital impact on the various learning processes and on equipping students for a future in a digital society and a digitalized school (Kunnskapsdepartementet, 2017; Kunnskapsdepartementet, 2019). The authorities have stated a desire for increased attention to be paid to both the use of digital technology and the development of online courses to adapt higher education to the present moment and make it accessible to more people (Meld. St. 16 (2016-2017); Fosslund and Ramberg, 2016). Over time, digital increased attention has contributed to a need for changes to be made to established learning and teaching methods (Meld. St. 16 (2016-2017), which Fosslund (2015) describes as “the digital turn” in higher education.

Beginning in the autumn of 2009, further education in arts and crafts for primary school teachers has been organized as an online course (30 ECTS) at USN. In this course, students meet weekly for synchronous screen-based teaching in a digital classroom, where all participants can see and hear one another. Since 2011, similar elective courses have also been open for teacher-training students (GLU). The arts and crafts program is structured as a 30-ECTS credit-awarding unit and consists of two courses of 15 ECTS credits each with a duration of two semesters. Here, the student groups have consisted of both students with different campus affiliations within USN and students from other educational institutions. Some fully trained teachers have also completed the course as competence-enhancing further education. An ideal upper admissions limit of 24 students has been set for this study program, which is justified by a requirement that the course must involve active, academic two-way communication both with the academic supervisor and between participants in the group who are scattered around the country.

The main difference between online and ordinary classroom teaching is that online teaching occurs in a digital classroom via video conferencing, where each participant is present in the form of a live image and live audio on the computer screen. This educational program is formally built around a weekly three-hour group meeting occurring for 10 weeks in the semester. In addition, individual and group mentoring are offered, both in an informal, voluntary form and in a compulsory form, involving set times for meetings. Each semester, the student groups also gather on campus for five consecutive days for subject days in the various special workshops. These sessions are mandatory and very important for both students and teachers in order to create good relationships within the group. The course descriptions present goals, learning outcome descriptions and forms of assessment, where both structure and wording make clear references to the national central curriculums for primary and lower secondary teacher education for grades 1–7 and 5–10 (Kunnskapsdepartementet, 2010a; Kunnskapsdepartementet, 2010b). In addition, the study program is based on detailed semester plans that reflect and clarify the content of the course plans and indicate where the syllabus literature can be found. The semester plans are aligned with the local management documents prepared by the course coordinator in collaboration with other responsible subject teachers. In terms of content, the autumn semester focuses on the two-dimensional image area, while the spring semester focuses on three-

dimensional material studies and working with materials. There are three to four work requirements worth 15 ECTS credits, ranging from exercises in various materials and techniques to more comprehensive problem-based tasks, where process and product documentation, theory and didactic reflections are included as part of the work. The work requirements are provided in digital folders on the university's learning platform. The subject teacher's feedback on the work requirement, the students' self-assessment and individual mentoring facilitate an active assessment practice. In accordance with assessment practice “assessment for learning” (Engh et al., 2007), the synergies that arise between teaching and learning are used as a basis for improving the student's performance. A student's work requirements from the entire semester must be approved before they can complete their exams, both in the autumn and the spring. The exam takes the form of a digital portfolio submission, where the students themselves select one of their already completed and approved work requirements alongside a completed and approved work requirement selected by the course coordinator. In this way, the examination form allows for the processing and improvement of the work requirements. For those responsible for the academic administration of the course, this assessment form has been a basic strategy used to focus on, identify and assess qualities that can replace and challenge the established analogue teaching methods in the subject.

The uniqueness of the subject of arts and crafts

The arts and crafts study subject in Norwegian teacher education is an aesthetic subject that incorporates different traditions, ranging from the craftsman's emphasis on material traditions and the reproduction of work processes to the designer's development of ideas and problem-solving strategies. It also includes a role for the artist's free creative work set within the didactic context of the subject (Utdanningsdirektoratet, 2016). My chosen starting point is the curriculum for arts and crafts (LK20), where the subject's central structures are described through the four “Core Elements”: Craft Skills, Arts and Design Processes, Visual Communication and Cultural Understanding (KD, 2019).

Development of practical skills, both in materials and through digital technology, is a key area in teaching. Aesthetics is included as a significant component of this area and is put into context with both professional knowledge and practical skills in a sensory form of communication (Austring and Sørensen, 2006, 2019). Online teaching in real-time provides space for both visual and auditory sensory communication, while at the same time limiting the opportunities for sensory communication using other sensory modalities. This is attempted to be partly compensated for by an emphasis on the use of flipped teaching as a pedagogical principle. Here, the practical training is presented in the form of various digital learning resources and used as a basis for the individual student's work. For example, for work requirements within different material areas, instructive films are used as introductions to a task period. Students themselves are primarily responsible for deciding when and how to use the digital learning resources. The learning work also requires students to assess and obtain materials and tools on their own. Knowledge of materials, techniques and tools obtained in this way often gives a local, cultural touch to the task solution and can lead to greater diversity than is found in student groups with a campus affiliation. In arts and crafts, academic processes largely entail individual work, but as a subject in professional education, where the student's goal is to become a primary school teacher, subject didactics forms part of a larger socio-cultural context. This means that subjects, subject didactics, pedagogy and practice must be closely linked, in terms of both content and organization. In the arts and crafts elective subject that is taught online as part of teacher education, the students must acquire knowledge and skills within a versatile and complex subject field, using both analogue and digital methods. Arts and crafts is thus largely about action, activity and participation. A challenge that I, as a teacher, have perceived as increasingly common in recent years relates to the imbalance between students' activity and engagement in the online classroom. This imbalance has led directly to students' increasing tendency to not log in with video and audio, as is required for the completion of the course. Students sitting behind inactive screens can still see everything that goes on in the digital classroom, but neither I as a teacher nor the others in the student group know for sure whether there actually is a person behind the blank screen.

Personal experience with online teaching

As a teacher, I have always viewed teaching students online as interesting and opportunity-creating, but also challenging. In my experiences with online teaching of the subject of arts and crafts, I believe I have, over time, observed a change in students' approach to the subject. This change has manifested most clearly in reduced interaction between the students and myself as a teacher. Over time, students have developed a role that is more receptive than participatory. Students obediently interact and complete activities when they are on the program, but they lack commitment. The student groups nevertheless achieve good grades, and the faculty's evaluations show that students find the teaching interesting. A basic technical prerequisite for creating an active learning environment in the digital classroom is that all students attend the sessions with both their video and audio switched on. As a teacher, I found it both annoying and exhausting when students chose to attend without live video. In the absence of physical presence in the classroom, I began to reflect on possible changes I could make to reduce the impression of physical distance. This resulted in me developing a new strategic approach to teaching. I emphasized starting from my (i.e., the teacher's) own subjective approach to the creative activity by referring to both process and product from my own artistic development work. In communicating with students, I chose to show photographs alongside oral narration. In online teaching, this strategy has had a dual purpose: it has served not only as an aesthetic language form through which I can present myself as a subject teacher to a new group of students, but also as a kind of explanatory metaphor, because it in itself also describes the structure of a creative process, from idea and idea development to finished and communicated product.

It is in the online classroom that opportunities for academic elaboration and opinion creation lie, both for the students individually and as a group. Based on a focus on and need for increased activity in the online classroom, where professional interaction, relationship-building and activity are at the center, I developed a *narrative strategy*. In this context, narrative strategy refers to the teacher's subject-didactic approach that is built as a professional event sequence around a story with the intention of creating professional understanding and context, here referred to as *professional opinion creation*. When online teaching rules out physical proximity to one another and to the materials, creative and *embodied making and learning* must necessarily be communicated in a way different from that used in on-campus workshops.

Through a multimodal presentation, which incorporated photos and oral narration from my own textile image-creating process, I also conveyed the interplay between emotions and body-based experience and learning. This form of communicating the practitioner's experiential knowledge in practice has similarities with video documentation, as Groth (2017) and Riis (2016) refer to in their PhD surveys. Through narrative strategy, I came closer to body-based communication.

The narrative strategy in my project is expressed first and foremost by opening a “new channel” for communication between the teacher and the students in online teaching. I achieve this, firstly, by talking openly about my own creative work in materials, its basis and motivations, the challenges I face and how I try to solve these. By presenting photos from the process and product work, I also convey something about the surrounding culture and my own body-based experiences. Secondly, I make it possible for the students to recognize themselves in creative work by interpreting, discovering and recalling previous body-based experiences. This double process thus centers on symbolic, meaningful communication between me as the teacher and the students in online teaching.

Narrative strategy was not a conscious strategy when I started teaching the first group of online students. My project was motivated more by a desire for improved communication and an intuitive understanding of how emphasizing one's own artistic development work could contribute to this improvement. My understanding of narrative strategy grew as the project in the first group of students progressed, through conversations with colleagues both within and outside the subject, literature reviews and, not least, the execution of a relatively comprehensive course evaluation. In this article, I present a new didactic approach to arts and crafts in online education that can help to compensate for the lack of physical presence, create room for professional play and reveal other opportunities for exploring materials, tools and techniques. The aim of the article is to shed light on the following question:

What role does narrative strategy play in creating professional meaning in an online arts and crafts course for teacher students?

THEORETICAL FRAMEWORK

In this study, I used narrative strategy to improve relations between teacher and students and increase student activity within the online classroom. The importance of positive relationships between teacher and student is well documented in the pedagogical literature. Hattie (2012, p. 165) emphasizes a positive teacher–student relationship as one of the key factors for effective learning. In the digital classroom, many traditional tools, such as immediate physical proximity to materials, tool training and social experiences that occur naturally in a group within a physical classroom, are necessarily limited and different when opportunities to form different sensory impressions, based on sound, smell, spatial understanding and tactility, are absent. However, this absence can invite reflection on alternative ways to create positive relationships. This was largely my experience before I embarked on my teaching work. According to Bruner (1997), we search for personal strategies in order to feel at home in the world and to know where to situate ourselves. From such a perspective, a narrative strategy is based on the narrative as an instrument for motivation and opinion formation. Bruner (1990) argues that opinion formation occurs through the interpretation of the events in the narrative, which is therefore the means of understanding what is happening or has happened, how it could have happened or why it happened.

When I as a teacher chose such a strategy for the first meeting with the new students in arts and crafts, I turned my attention to something that has a personal meaning for me as both a teacher and a creative person. I believed that this form of communication would help to make something visible about my identity and myself as a professional and professional developer in teacher education (Molander & Smedby, 2013). Eisner (1979, 2002) argues for emphasizing artistic approaches and giving space to art and the artistic way of thinking in all teaching. In this way, pedagogical improvisers are developed; that is, teachers who can relate to different pedagogical situations and are able to use several solution strategies. As teachers of art, we must contribute to the students' development as creative problem solvers rather than technical robots (Eisner, 2002). Real-time online teaching is a new educational practice, where new meanings in connection with both social and historical professional contexts must be created and developed. In the subject of arts and crafts, the importance of the body in creative work is emphasized through body-based action and embodied cognition (Groth, 2017; Gulliksen, 2017; Riis, 2016). According to Merleau-Ponty (1994), we are bodies in the world, and our understanding of the world is the result of bodily sensing and action. According to both Bruner (1996, p. 21) and Polkinghorne (1988, p. 1), narrative understanding is about meaningful bodily experience in time and space. Such an understanding is linked to Bruner's (1970, 1997) theory of discovery learning, which is based on the understanding that opinion formation involves being active by discovering through observation and through comparison by actively searching for similarities and differences (1970). Discovery learning is part of a larger learning concept referred to as "spiral curriculum" (Bruner, 1960). The spiral principle focuses on repeatedly circling back to the subject's basic ideas in order to create meaning and develop connections (Bruner, 1970, p. 86-89). This form emphasizes and presupposes the individual's self-reliance for their own learning through activating teaching methods (Bruner, 1997, p. 33), as is also the case in online teaching, which places other demands on students' motivation and commitment. Bandura places great emphasis on belief-mastery (self-efficacy) through the competent self (Kähler, 2012). To build mastery beliefs, the observation of role models is essential. Bandura (1977) refers to this theory as modeling. As an example of modeling, he speaks about a person who is going to learn to drive a car. This person will describe the process as complex and difficult if they have never seen another person drive a car (Bandura, 1962, p. 212). Bandura called such a competence "deputy" or "substitute reinforcement" (1962). Both Bruner (Aukrust, 1996) and Bandura (Kähler, 2012) advocate social constructivism as an epistemological position. Such a view of learning implies that the acquisition and development of knowledge involves the individual's construction of learning takes place in interaction with others.

INTRODUCTORY NARRATIVE

In the introductory narrative, I presented photos from my own creative textile image process while performing a verbal narrative. The actual presentation lasted less than 15 minutes and overall clearly emphasized making me visible as a creative person. I based it on my own artistic research and development work from the spring of 2012, giving it the theme “didactic visualizations in work with textile materials and digital technology.” The work was based on a humorous medieval ballad in the tradition of Telemark. It resulted in a textile photo series that was given the same name as the ballad, *Ramnebryllup i Kråkelund* (University of Oslo, 2014), translated to English as *Raven Wedding in Crowfield*. The technical part of the work was a continuation of my own creative work conducted for my master's degree, titled “When the textile meets the digital: Investigations through own and students' creative work” (Baskår, 2006). In introducing myself as a teacher to a new group of online students, I now replaced the formal presentation with a presentation of myself as a creative person using both process and product photos, shown as solid images on the screen, and oral narration in the digital classroom. The presentation is as follows:

Ever since childhood, embroidery and stitching with needle and thread on different types of textiles have been an important part of me as a creative person. Developing textile images was a part of this activity from early on; I drew pictures with needle and thread. In adulthood, a change occurred 15 years ago when I purchased a sewing machine with a versatile digital embroidery unit. This opened up new ways and opportunities for developing textile images.

On the screen in front of you (FIGURE 1), you see one of my textile expressions, which depicts the proud rooster as it theatrically kicks and crows a kurkeliku after stealing a flatbread from a [stabbur]. You will probably understand the purpose of the flatbread gift from the context of the entire story, but I will first tell you about the development of these textile images.



FIGURE 1. Digital stitched textile image: The proud rooster stole a flatbread from a stabbur [storehouse].

I often obtain inspiration for my textile images' content and form from my personal, lifelong and close relationship with rhymes, verses, legends, ballads and folk songs. This material and the aesthetic experiences with which it has provided me, also through vocal presentations, has been an important raw material for my fantasy world, a valuable foundation for the development of the content and form of different textile images.

Initially, in the creative process, it is a matter of suggesting an uncensored diversity of inner imaginative pictures. This is an important starting point for the further development of pictorial expressions. The images grow like different thinking processes, starting as vague and thoughtful ideas, turning into different sketches and tests of materials and techniques and ultimately becoming finished expressions. In all parts of the creative process, I find the excitement and drive I need to move the image process forward. This picture story, which is originally from a humorous medieval ballad called Raven Wedding in Crowfield, is a way of communicating such a process. The ballad is about a traditional wedding party in which people are replaced by different animal characters who "play" different people. The animals of the forest are guests at the wedding. They have different tasks at the wedding and bring parodic presents for the couple.

Here you see (FIGURE 2) the goat that brought cheese, bread and lots of other good foods to the wedding. The goat is known for cleaning the table, hence the nickname "table licker."



FIGURE 2. Digital stitched textile image: The goat brought lots of good foods to the wedding.

The male bear (FIGURE 3) is known to be vain. To get to the wedding, he had to swim over the fjord, but he was wary because he did not want to arrive at the wedding with wet fur. I am unsure whether he attended the wedding.



FIGURE 3. Digital stitched textile image: The vain male bear would not get his fur wet.



FIGURE 4. Digital stitched textile image: The bride and groom on their way to their wedding.



FIGURE 5. Digital stitched textile image: Some of the wedding guests.



FIGURE 6. Digital stitched textile image: The heron walked the crane to the altar.

In this textile expression (FIGURE 4), you see the bride and groom, the white slim crane as the bride and the awkward little black raven as the bridegroom. Here, they walk into the crowfield on their way to their wedding.

Here (FIGURE 5) are some of the wedding guests who arrived at the wedding party. The crow was given a job as a maid, and the magpie is the beer-server.

This picture (FIGURE 6) shows the wedding. It was the heron who walked the crane bride to the altar, while the swallow was the bridesmaid.

This series contains a total of nine images. Common to all the pictures is that they are stitched with a digital sewing machine on a “Baskerlinen,” which is an unbleached blend of cotton and linen. Different thread qualities are used in the stitching: the majority is silk and cotton, but there is also some polyester. The pictures measure approximately 40 cm x 60 cm.

This (FIGURE 7) is a detail of the sheep who acted as the priest at the wedding. The sewing thread is in different thicknesses and shades of white. Both matte and glossy threads are used, which make different expressions and variations in the surface.



FIGURE 7. Digital stitched textile image: The sheep was the priest at the wedding.

I have included this image (FIGURE 8) in order to visualize all the possibilities for variation that may arise through the use of different thread qualities, such as thickness and whiteness.

Due to the limited selection of suitable materials available locally, I often seek to find suitable fabric types and thread qualities online. It is challenging to imagine qualities and quality differences through screenshots without being able to examine the materials in a tactile manner, using *fingerspitzgefühl* or “women’s fingers,” as some call it locally. A challenge involved in the material area in work on textile images has been finding suitable material qualities in the context of aesthetic assessments of the desired expression.

These images (FIGURE 9) show how these textile pictures are developed: I use a digital sewing machine with an accompanying embroidery unit. In addition, I use two computers in order to handle the embroidery program and work with image processing during the process.



FIGURES 8. and 9. Different qualities of sewing thread and white shades (FIGURE 8). Digital tools and materials (FIGURE 9).

Once I have processed the image sketches in the digital software, I test the planned digital design by stitching the image with the digital sewing machine. In this photograph (FIGURE 10), you can see how the images are hung on a string to make it easier to study the qualities of the image designs, such as shapes, stitch density, stitch lengths, colors, thread attachments and other similar aspects. In this process, I write down the desired changes in a notebook and make adjustments according to the notes. It often takes several adjustments before the design is the way I want it. Making these adjustments can be a laborious and long process. This material, together with the written notes, forms a process documentation that can be useful in the development of other images, as parts of the design can be used in other contexts.

In such a digital stitching process, the backside (FIGURE 11) also has an expression quality that is included in the assessment in the process context. There is also a great deal of technical information involved in this part of the work.



FIGURES 10 and 11. Testing of digital and material design (FIGURE 10). The significance of the reverse side of the image (FIGURE 11).

An important part of the creative process is presenting such image expressions in physical, spatial form as an exhibition. Here (FIGURE 12), you see a photo from the exhibition Textile Stories 2012, where these textile images were presented.



FIGURE 12. From the exhibition at the Foaje Gallery, Notodden.



FIGURE 13. Digital stitched textile image: The bear sow and the angry wolf fought at the wedding.

Finally, I want to take you back to the wedding party in the crowfield. Of course, this wedding, as was usual in the old days, also involved a real fist fight, here (FIGURE) between the wolf and the bear sow. The wolf became so angry that he threw a silver bowl to the floor. The bear sow is, as you can see, equipped with a women's handbag, which is an undervalued weapon in a wedding context.

SUMMARY OF THE LECTURE

After the introductory narrative, I tried to clarify the process for the students by pointing out some strategic values and choices that marked the process. These can be said to have a relatively general character, in the sense that they are relevant to creative work that considers the process from idea to finished communicated form, and so they were also relevant to many of the works the students were about to engage in. In condensed form, these values and choices were as follows:

- *The presentation*: To present myself as a creative person, I used aesthetically symbolic language, in accordance with Austring and Sørensen (2006, 2019). The introductory narrative was based on an oral narrative which, together with photographs of my textile imagery, sought to represent my subjectivity in the task as a sensory body present in an environment. The process and product photographs were small, independent stories that were introduced in the presentation.
- *The teacher's subjective story about her relationship to creative work*: Here, my starting point was my lifelong involvement with different forms of embroidery and how I, beginning in childhood, have used needle and thread in different ways, which has become an important part of my identity and my form culture.
- *Inspirational material*: is about how I evoke, in an uncensored manner, various performance images, play with them in my imagination and put them together in new images and new contexts.
- *Idea development*: is about creative work and the fundamental importance of the idea phase in which all solutions are possible and nothing is impossible. An important part of this phase is the recognition of the value of acting with wonder and curiosity, in a searching manner, to turn over all stones on the way towards a possible solution.
- *Selection and assessment*: are about choosing, trying out, transforming, realizing and communicating in the pursuit of a sensible form, that is, an expression.
- *Materials and techniques*: deal with the choice of instruments, such as materials, techniques and tests and assessments of qualities.
- *From sketches to finished design*: revolves around the process from sketches, work drawings and various tests to finished designs. This phase is linked to the structured planning, model design and drafts that are assessed and selected until they satisfy the impulse and the ideas that set the action in motion in the best possible way. Through this work, the sensible form is created.
- *Development of textile images with a digital sewing machine*: is about the adjustments of all details that must be in place before the image design is prepared for embroidery. Process documentation, in the form of written notes about colour codes, qualities and stitch information, has a useful function in connection with the image being redesigned and used in other, new contexts.

- *Exhibition and dissemination*: are important parts of a creative process related to presenting the image expressions in a physical, spatial form as an exhibition.

RESEARCH STRATEGY: PEDAGOGICAL ACTION RESEARCH

The study presented in this article took a qualitative approach that involved close collaboration between the teacher as researcher and the students as research participants. The research carried out in the teaching sessions together with the students was inspired by the practical pedagogical action research tradition, also called “teacher research” or “pedagogical action research.” Action research in pedagogical contexts centers on the importance of teachers themselves contributing to the development of professional knowledge, both for the individual teacher and for the profession itself (Carr & Kemmis, 1986; Elliott, 1991; Hiim, 2010, 2013; Kemmis, 2001; Stenhouse, 1975; Whitehead & McNiff, 2006). According to Zeichner (2002), what is special about this approach to action research is its relation to practical–theoretical didactics, where the systematic use of didactic concepts in reflection on teaching and learning is seen as fundamental. The study presented in this article was focused on developing an understanding of practice and further changing the situation in which the action or practice takes place. Pedagogical action research takes just such an approach, where asking questions about one's own practice and focusing on the actual tasks teachers perform in their work are emphasized. In this way, thoughts and ideas are united within the field of education. It involves dealing with a professional issue through using a reflective lens and methodically working out different steps. Action is taken to deal with the issue within the framework of teacher education. Questions inspired by Hiim (2010) and Whitehead and McNiff (2006) were emphasized in order to ensure validity in this action research study. The questions were: What experiences should be described to show what happened? What data show the developments that have occurred? How can one describe and evaluate the findings in and of the learning process?

Narrative strategy was the action in this study and thus drew attention to the impact of this action in the online teaching of arts and crafts in teacher education. The action was a search for new ways to use professional teaching materials to improve activity and interaction between the students and me as a teacher in the online classroom. The initial action for the academic year, which I called “introductory narrative,” was a didactic program developed around my story and my strategy and conveyed in aesthetically symbolic language with the aim of devising a teaching method better adapted for communication and interaction in the online classroom. Narrative strategy is a teacher's presentation of herself in her first meeting with her online students at the beginning of the academic year. For the teaching staff, it has been common to present oneself by sharing primarily formal, factual information. This time, I chose a form of presentation that used aesthetic and symbolic language. To find solutions to the problem, I obtained and analyzed observation material from two observations in two different student groups in GLU arts and crafts. Over the years, there has been variation in the year in which the elective subject arts and crafts has been placed in GLU. All the students in the survey had basic knowledge of the student's role, but varied in their knowledge of what being an online student involves. The student groups were similar in numerous respects: they consisted exclusively of women, the average age was over 30 years and they lived in different parts of the country. Both groups were composed of students from different GLU classes and stages, from both USN and other educational institutions. None of the students had previous formal education in arts and crafts, while a few had a limited degree of subject-related experience from folk high school and temporary work in kindergarten and school.

My areas of responsibility in the groups were general course responsibilities during the semester and teaching five sessions of three hours each in the online classroom. In addition, I was responsible for part of the workshop teaching on campus. Group 1, which consisted of 19 students, was to start with the course “Crafts, design, sculpture and entrepreneurship” (15 ECTS). The work requirement included ideas and product development in simple bag design, where the techniques of cardboard looms, back strap looms and versatile experience with and knowledge and use of different yarn qualities were key requirement specifications. Group 2 consisted of 15 students who were to start

with the subject “Image, graphic design and visual communication.” The work requirement for these students included idea and product development in the field of graphic design, more specifically the development of a book cover adapted to a target group of children. Both student groups were presented with my introductory narrative in their first encounter with me as a teacher and with the semester. Group 1 completed the work requirement in the spring semester, while Group 2 completed the work requirement in the following autumn semester. In my work with Group 1 during the semester, I experienced gradual growth in my understanding of the use of narrative strategy. This meant that I had had important experiences when I started the course with Group 2. The strategy thus had a clearer and more conscious focus in my work with Group 2 than was the case in my work with Group 1. The surveys are not identical for the reasons mentioned above but follow essentially the same template. To give the clearest possible picture of the surveys, and because development over time was a focus of the study, I thought it was most appropriate for the sample to be taken from one of the groups. The data are taken from Group 2, as these data were the most comprehensive in form and therefore best suited as a basis for the analysis work. Here, I could also build the observation work on experiences I had had in my work with Group 1. Data were collected primarily from the activities in the digital classroom, but also included empirical data from the physical gatherings on campus. This choice was made because gatherings are a natural part of and characterize the form of online teaching (Fosslund, 2015).

The environment and framework for the study of the online classroom can best be described as a limited sensory environment. The implementation of this part of the study involved visual and auditory observation of what was happening in the video conference on the computer screen. The computer screen can be visually divided into three main fields: the pictures of the students, the chat box and the desktop. The arrangement of photos and chat box is flexible and can be adjusted according to the user’s own wishes. The pictures of the students and the teacher are no bigger than a matchbox and provide space for only the head and some of the surrounding physical environment. Everyone in the digital classroom sees the same thing, but the different parts can be organized according to the user’s own wishes, as illustrated in FIGURE 14.

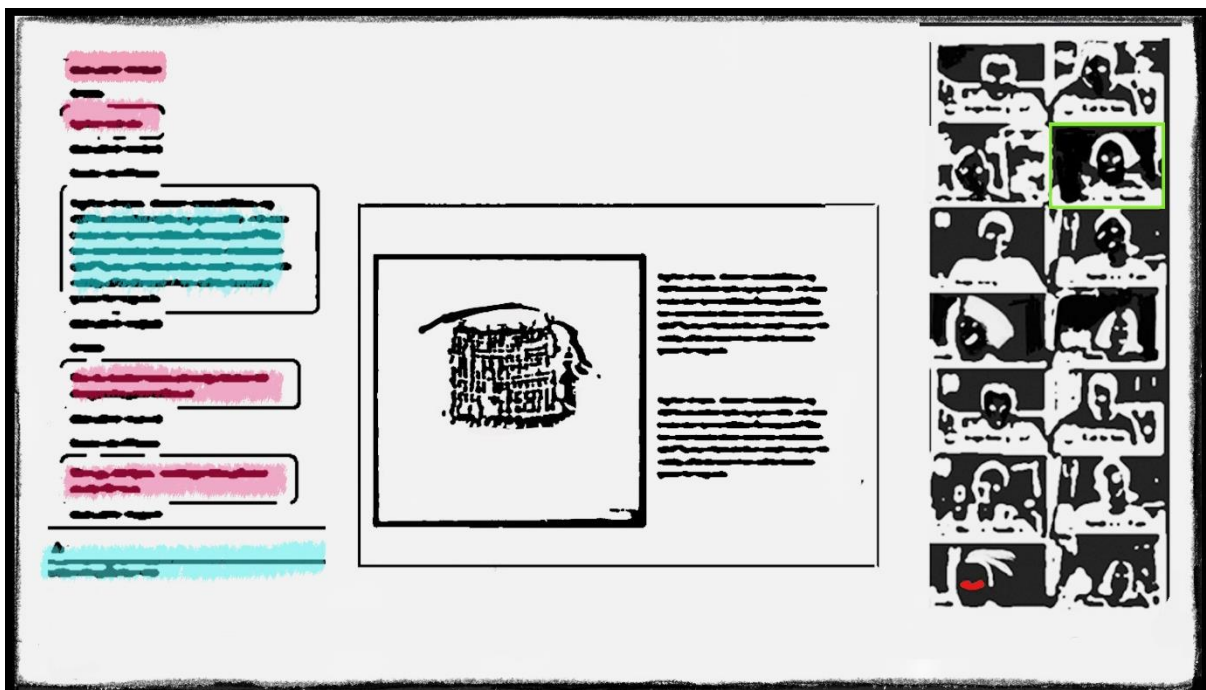


FIGURE 14. Illustration of the online classroom as I like to organize it.

In the action research process, I used an observation form for documentation, specifically one A3 sheet for each hour. The form was divided into three fields, where the first field captured descriptions; the

second immediate thoughts, questions and interpretations; and the third smaller descriptive sketches and symbols that helped me remember connections. In principle, this is similar to Postholm and Moens' (2018, p. 56) descriptions of observation notes for use in action research. I placed the observation form next to the keyboard and wrote by hand without taking my eyes off the students on the screen. The actual observation process in the online classroom was very limited, seen in relation to physical workshop activity. When teaching at the on-campus gatherings, I got close to the students in both the physical and the social way. According to Vedeler (2000), this is one of the strengths of observation as method, she describes this sensory quality as it “appear[ed] to me directly”. In the workshop, I had to consciously set aside time to form an overview of the situation and make observation notes. The documentation from both the online and the on-campus teaching shows the process of registering and reproducing the data that was the starting point for my reflections on the impact of narrative strategy in arts and crafts teaching in teacher education.

The students in the classes were informed about the research process, about my role as a teacher–researcher and their status in the project as co-researchers. They were further informed about the plan so that they were updated on what I had done and what I was going to do. The students were told that they could give notice at any time if they did not want to participate further. The data I collected from the teaching sessions were general, and the observations were never recorded with names or other sensitive information. In the research process, I worked alone, but a professional colleague with experience in online teaching became involved and weighed in on issues that arose throughout the development and implementation process. Colleagues working in online education in GLU were involved in selected sections of the project, which included providing insight into general issues related to online education, such as the problem of students’ unwillingness to activate their computer cameras.

By actively participating and being present throughout the teaching process and in the research situations, I observed that the students referred to my initial narrative presentation of the academic year constantly and in different contexts as a form of teaching, in specific cases and as a starting point for their development of a professional, academic understanding of creative work. Because I was using pedagogical action research and relating closely to the phenomena that I was studying, it was necessary to elucidate and elaborate on an increasing number of components of the problem, not least because of the rounds of reflection I completed along the way. It turned out that the shared experience of my introductory narrative at the beginning of the year triggered activity in the form of professional interest, participation and commitment, as well as students’ fearless search for their own strategies in online teaching. Furthermore, I selected teaching sessions based on my assumptions about how suitable they were to providing information related to the issue. In the analysis of the observation material in this study, I used different approaches to identify the impact of the teacher's use of narrative strategy in online teaching. I searched for expressions of the students' professional opinion creation in their own creative work, where opinion creation is understood as acquiring new information, transferring the knowledge into new academic contexts. I also examined how modeling, understood as vicarious reinforcement, was expressed through the survey. The survey also sought information about how the teacher's use of narrative strategy inspired the students in their own creative work and how this affected their understanding of the subject and their communication with the teacher and their fellow students.

THE INTRODUCTORY NARRATIVE AS A BASIS FOR INCREASED PROFESSIONAL INTEREST, PARTICIPATION AND COMMITMENT

I already noticed the students' commitment and desire for active participation during the first hour we were gathered in the online classroom. After I urged the students to activate their cameras so we could all see one another, all except two students had active images. I started the introductory narrative to introduce myself. While I was sharing the first image from the introductory narrative on the screen, these two students activated their cameras: first one, followed closely by the other. I interpreted this as meaning that both students experienced a need to actively seek out the classroom environment by making themselves visible.

During the first break after the presentation of the introductory narrative, most students switched off their video. Two of the students kept their cameras on during the break. I recorded the following introduction to a conversation that developed between these two students: “Have you seen such a sewing machine?” one said. “No, it looked fun!” said the other. After this introduction, the two students continued to talk about where they lived and about online teaching as a form until the break was over. I was fascinated by the fact that the introductory narrative had influenced the starting point for spontaneous engagement between these two students, who impulsively initiated a conversation with reference to my use of a digital sewing machine. In my interpretation, the two former strangers used a common aesthetic experience as inspiration to create contact.

During the semester, a prominent collaboration between the online students quickly developed. This collaboration was largely linked to the introductory narrative. Gradually, the students also started to use references to the introductory narrative as a basis for discussing one another's approaches to the assignments. Activities and content that appeared in connection with the comments in the chat field in the online classroom created a synergistic effect in many ways, in that the students both got involved and were inspired and engaged. This helped to create a positive atmosphere in the digital classroom.

Online students in arts and crafts meet on campus for five days each semester for teaching in the special workshops. At this gathering, I was responsible for the first day, where drawing and picture work were the themes. The session took place in a project room, a large neutrally furnished room with particularly favorable lighting. One part of the room was adapted for drawing work at easels, and the other served as a gathering zone with a projector and chairs. The room was laid out the day before the session took place.

Some students were already sitting along the wall in the corridor outside the room before classes began. As I passed by, I overheard parts of a conversation between them: “... I think I liked the sheep best,” said one student. “Oh, that bear sat so cozily,” the other replied.

In the teaching session, students performed drawing exercises using several drawing techniques. The drawing exercises produced both a lot of activity and deep concentration. The teacher presented examples from the art field in a common forum, as well as small introductory sessions about the purpose of the exercises, which were followed by a demonstration of technique. Students then completed a long series of drawing exercises, each of which evoked frustration, smiles and laughter in its own way. The students moved from one easel to another to look at one another's pictures during the work session. Questions that were asked repeatedly were “How did you do that, can you show us?,” “So nice, I want to try that too” and “What was this technique called again?” In the reflection round after the first drawing session, the students showed clear understanding in relation to the utility of the various drawing exercises in school and teaching. An unexpected question arose that referred directly to the introductory narrative, which I had presented at the beginning of the year: whether I “sang folk music,” and if I could sing for them. The atmosphere in the room and the situation invited intimacy, so I found the pictures for the song they had already encountered and sang all the verses. I asked the students if they thought it was strange that I was standing in front of them in an arts and crafts class teaching singing. At the same time, I used the opportunity to tell the students that I had been anxious to find out whether they would perceive the year's initial presentation as intrusive or self-congratulatory. The students responded with these answers: “No, it's nice,” said one. “This is the first time a teacher has talked about herself like that,” said another. “I was a little excited to meet you, it was so fun to see the pictures,” said a third. “It is not that strange that an arts and crafts teacher makes pictures,” said a fourth, rounding off the conversation.

The conversation the students had been having when I came to unlock the room in the morning was clearly about some of the motifs from the textile pictures I had presented in the introductory narrative. In my interpretation, these pictures served as a common reference that the students used to make contact with one another. I was fascinated by the fact that the students had memorized the pictures and were now able to describe their content after several weeks had passed. The level of activity in the class varied from quiet and concentrated work, when the students were working at the easels, to the occasional outburst of frustration or laughter. I noticed that the students imitated my

actions, both bodily, in terms of how I stood in front of the easel and how I placed my legs, and professionally, in relation to how I “attacked” the drawing pad on the easel with the drawing tools. Between the drawing exercises, there was full activity, and I interpreted the atmosphere in the room as positive and friendly. The students moved from easel to easel to look at one another's pictures. They also imitated one another's attack strategies and content in the task solutions in different ways and to varying degrees, and they did not try to hide that they wanted to imitate parts of others' work. The students generously shared their knowledge and willingly showed their skills to their fellow students. I drew quick observation sketches of who imitated whom in the classroom and continued to do so throughout the day. I noticed that in the students' conversations, they made reference to the activity itself, the name of the technique and the products.

When the students asked if I could sing for them, I understood from the situation that a group of students had interpreted and discussed what I had actually said in my introductory narrative, whether I practiced singing or not. The atmosphere and the students' attitude and gaze made me continue both the song and the slide show throughout the show. When I finished the song, it was a bit quiet, but not awkward.

In my interpretation of the situations described above, my introductory narrative had helped to create a breeding ground for activity and engagement in a community where the students cooperated and collaborated in order to assess one another constructively, laughed and had friendly attitudes. I also observed that the students increasingly used specific academic terms, both in their own conversations and when they approached the teacher, and that they used both the teacher and their fellow students as models. Afterwards, most students also became actively and fearlessly involved in creative reflection on and discussion of subject-didactic issues related to the use and adaptation of specific drawing exercises at various stages in primary school.

THE INTRODUCTORY NARRATIVE AS A BASIS FOR STUDENTS' OWN SELECTIONS OF STRATEGIES

In the online classroom, I immediately noticed that the students' individual presentations had a clear subjective character when they were tasked with justifying their choice of subject. Most students used, among other things, a free narrative form in which they referenced creative activities embedded in or as a framework for their justifications. They made reference to various content structures in the subject, such as image-processing techniques in working with Photoshop and the desire for training in various techniques in image creation that could be used in a blog context. Further, in the example with the wood basket, expectations were related to material knowledge. One student also referred to the place of form culture in a school where she had been a substitute teacher.

One student imitated the concept of the “fantasy world” when she explained her own illustration work. I interpreted this student as having been inspired to imitate the concept from the introductory narrative. To clarify the significance of what role imagination had in my image process, I emphasized the value of imagination and used the phrase “in my fantasy world.” It was interesting to note that this student actually hesitated slightly and sort of “took the plunge” when she used the term, as if she had really dared to do something for the first time.

Another student referred to her own blog and shared the blog's address in the chat field. In my interpretation of this action, the initial narrative had clarified her need to develop illustrative images for her blog by learning something about colors, shape and composition. The student with the wood basket was inspired by the student who shared the blog address to share a photo on the screen. Both my use of introductory narrative and aspects of what the other students said and did were used as meaning content in the students' explanations of why they had chosen arts and crafts in their subject area.

The week before the on-campus session, the students had been given a problem-based assignment that required them to develop a graphic design for the front of a picture book aimed at children. The students had to attend an online mentoring session in the digital classroom, where each student had to present their ideas and reflections in relation to the task within the image area of graphic design. Prior to the mentoring session, I had published a list on the learning platform that showed the presentation time for each individual student. A total of 12 minutes was set aside for each student, of

which approximately eight minutes were allocated for the actual presentation and two minutes for mentoring and feedback from the teacher. The other students commented continuously in the chat field. The last two minutes were used to upload and share the next person's document.

Even though it had been many weeks since I introduced myself at the beginning of the year, four students used the initial narrative as a basis for explaining their reflections around the image design. These were some of the answers: "I really like the form, but also the content of these apps and want them to have a place in the picture, almost like you did with the song you used;" "I will try to use the most different shades of white, a bit like you showed us with the threads for the sheep, I think it will be nice against black carbon pins;" "I thought of the animals that you showed us and I felt like giving them some human traits;" "Oh, I'm not happy yet – I have changed and changed it, I do not get it the way I see it, you also said that you sometimes have to do it several times?" No students had prior experience with this kind of mentoring. I approached a student who had clearly put a lot of work into her presentation and asked how she had proceeded. She replied: "Yes, I tried to do something like you, but it will be completely different because this assignment was something completely different and is just about the idea phase." As a follow-up question, I asked: "Can you say what you did that you learned from my presentation?" The student replied: "At least showing pictures and talking at the same time." In the chat field, other students had added statements, including: "Only show a few clear pictures and not a bunch," "Can rather clarify with talk," "As a basic prerequisite for further work," "Have had photo story in Norwegian lessons." A student said: "When your pictures hung on the string, was it almost the same thing that we're doing now?"

The last hour in the online classroom was to be used to introduce the students to the creativity model from the prescribed book *Slagkraft* by Erik Lerdahl (2007). This model is relatively complex, and it also contains several subject concepts that are fundamental for understanding the model's structure. In connection with this teaching process, space was also set aside for clarifying questions and comments from the students. I was impressed by the commitment, structure and content of what the students presented in the mentoring session. They were well prepared and not afraid to make mistakes: they showed both calmness and expectation of mastery in the mentoring situation. The introductory narrative as a form of presentation proved to have been fundamental for the students, for their idea development work and in other contexts. The students pointed out that they had had a photo story in Norwegian lessons that reminded them of the introductory narrative. This mentoring situation thus clearly showed how the introductory narrative had functioned as a versatile basis for reflection. One of the students also had a clear understanding of the significance of the idea development process for the creative process as a whole. She showed this by highlighting idea development as an important part of the holistic creative process. In this way, she showed how she creates meaningful unities in the subject that likely developed and expanded her understanding of the subject's structure. The introductory narrative was highlighted in several contexts as a model for the students' understanding and opinion formation in the subject, but now it primarily served as an example in their explanations of their own reflections. I chose to use the introductory narrative for exemplification and as an explanatory basis for the parameters in the creative model. This proved to be fruitful and appropriate in connection with fitting in and discussing the structures of the initial narrative in relation to the creativity model. Use of the content from the introductory narrative as familiar material for exemplification allowed the students to recognize themselves, get involved and participate in the dissemination and explanation of the parts of the model. The chat field had a central place in the digital classroom, in that the students' comments appeared in whole sentences that also contained reflection.

The introductory narrative was used as a basis for exemplification when the students were tasked with describing and explaining. Throughout the semester, students repeatedly used phrases in their conversations such as "like when she showed us," "when she talked about" and "like you showed us, then" The examples from the mentoring session show that the students both referred to and imitated introductory narratives, which they used in an ideological way in their own creative work with techniques, tools and materials and in presentations of their own work during the course. For example, a student who referred to impressions from the introductory narrative stated "I will try to use the most different shades of white, a bit like you showed with the threads of the sheep, I think it will be nice

against black carbon pins. "Such occurrences of the imitation of others' work can be understood as examples of what Bandura (1962) calls "vicarious reinforcement." He explains vicarious reinforcement by saying that most things are difficult to achieve if we have not seen someone do them before we try ourselves. Bandura (1986, pp. 142-181) describes these processes as active forms of learning, where the learning focuses more on independent re-creation than copying and repetition.

The student who was stuck with her work and was confused said "Oh, I'm not happy yet – I have changed and changed it, I do not get it the way I see it, you also said that you sometimes have to do it several times?" She referred here to the content of the introductory narrative where I emphasized idea development, the basic importance of the idea phase and how frustrating this phase could be, because all possible solutions are available, and selections and assessments have to be made. In connection with this mentoring, strategic points in the introductory narrative were again highlighted so that the student could orientate herself in and deepen the idea phase and thus make the necessary selections and assessments in relation to materials and techniques. According to Bruner (1970), such an understanding of the content of the idea phase is about developing and deepening the complexity of the basic structures, here exemplified through image creation. Using strategic points according to the introductory narrative, I believe that the student developed increased insight into creative work, which increased her ability to develop sensitive visual and communicative attention in online teaching. The student who said "Yes, I tried to do something like you, but it will be completely different because this assignment was something completely different and is just about the idea phase" clearly showed how narrative strategy had served as a basis for their reflection in the process, in that they abstracted known material and adapted it in new contexts and proceeded to develop knowledge. There were examples of modeling as imitation and in a more ideological sense in the online teaching sessions. For example, the student who imitated the concept of the "fantasy world" and the other students who emphasized incorporating their own experiences of creative work in their presentations of themselves without being asked to do so can be seen as using modeling in an ideological way. Bandura's (1986) theory of modeling emphasizes the importance of having several models in the learning process. Through the teaching session, it turned out that it was not only the subject teacher who acted as a model, but also the other students who were part of the social learning situation. The students' explanations of their motivation for choosing arts and crafts in their subject field coincides with what Bruner describes as discovery learning. Discovery learning is related to the students' pre-understanding of the subject, through the discoveries they have made in recognizing structures in the subject, such as special techniques, image work, material acquisition and form culture. I would argue that these discoveries provided the basis for spiral learning, in that students repeatedly circulated, developed, and expanded different aspects of these underlying structures of the subject.

It emerged from the observations in the workshop that each student, at one time or another, had acted as a model for the others. According to Bandura (1986), models can be perceived as informants. Observing through modeling can be seen as information processing, mainly in the form of visual and verbal constructions (Bandura, 1986, pp. 51-53). According to Bandura, modeling is about an idea-oriented relationship. I interpret the students' use of modeling as examples of conceptual models, a form of learning which, according to Bandura, goes from observing others to forming an individual idea of how new behavior is exercised in a purposeful action. In this way, the relationships between the informant and the others were not mechanically copied relationships but a result of a synergistic effect that developed between the members of the student group, through both personal and more random interactions. In the workshop context, it is clear that several models are used: the subject teacher as well as the other students.

My impression is that, through imitation, the students discovered parts of the subject, for example as connections between drawing tools and use, or method of attack and consequences for the result, in image creation. This aligns with what Bruner (1997) classifies as discovering and expanding alternately between parts and wholes in an active search for form. The students were fearless in their picture work. They were not afraid to show one another what had gone wrong, and they rejoiced over what went well and shared their knowledge willingly. In the subsequent summary and reflection session, the students also referred to picture work in school and how the drawing task could be divided and

combined in new ways in order to adapt it to different grade levels. In this example it appears that the students had formed underlying structures of understanding, in this context what image creation can be. Importantly, they could improvise in relation to parts such as different techniques, degree of difficulty and material experiences and divide the content and put it together again in new ways in a didactic context.

CONCLUSION

During the semester, both formal and informal channels for online dialogue developed between the students themselves and between teachers and students. In addition, in these dialogues, students increasingly used professional language and formulations that were also expressed in various written formulations. There were several signs that could indicate that the students developed a different focus on both content and form in connection with creative processes and creative work. I discovered that the students began to use different academic references from my introductory narrative. I would argue that, through my use of narrative strategy, students also developed a deeper focus on creative work that increased their sensitivity to both visual and verbal communication. I would also argue that the use of the introductory narrative provided the students with examples and concepts that enabled them to communicate about arts and crafts. The narrative became a common reference to which the students could resort in order to get to know one another.

Several times throughout the semester, students used phrases in conversations among themselves that referred to the introductory narrative, for example “like when she showed us,” “when she talked about” and “like you showed us, then...” In several cases throughout the year, my narrative presentation was used as both a background for concretization of the students' own creative work and as an example when the students explained their own work. A possible interpretation of what happened relates to the change in my presentation method in the direction of a more subjectively descriptive and personal form, which caused the learning conditions to change. There are also findings that indicate that changed learning conditions may have affected students' perceptions of how learning occurs. Several signs and statements point to the responsible academic communicator and mentor appearing as a more credible role model for the students. It turned out that the introductory narrative as a presentation had formed the core of a kind of teaching resource in the form of a basic lecture, which revealed the subject's uniqueness to the students. This became apparent through the students' professional use of concepts and their understanding of these concepts in their creative work and the presentation thereof. The teacher's presentation of a specially developed academic contribution provided the students with an orientation basis and motivation for their academic work.

The learning strategies that the students used to create meaning context in arts and crafts were revealed throughout the semester, in that the students were constantly searching for parts of the subject and tried to fit these into wholes, such as in the field of image, creativity and design. I find it appropriate to view the students' strategies in light of both Bandura's (1986, 1997) and Bruner's (1960, 1975, 1997) theories of modeling and discovery learning. Modeling emerged in teaching in both the digital classroom and on campus in the form of being intuitive, immediate and focused on short-term goals. In this way, modeling appeared as more or less a continuous processes. The spiral learning appeared as more superior and analytically oriented than modeling. Spiral learning proved to be the long-term common thread that created a connection between the subject's parts and wholes, understood as structures in the subject. These forms of learning complemented each other due to their different qualities. I would argue that these connections were essential for the students to develop important short-term surface- and partial knowledge, which, together with analytical holistic thinking, provided them with academic perspectives and enabled in-depth learning. In this way, the students' level of abstraction became clear throughout the semester. It seems as if the students continuously imitated role models – individuals found online, the teacher and the other students – while simultaneously expressing understanding of both the parts and wholes in an entire image-creating process.

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