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SYSTEMATIC COOPERATION FOR IMPROVED PRACTICE IN PRIMARY SCHOOLS' DESIGN EDUCATION IN THE ARTS AND CRAFTS SUBJECT

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ABSTRACT

This paper focuses on communities of practice and educational development with design education in the subject of Arts and Crafts in primary and lower secondary schools in Norway. In part, this study is based on research associated with my master's thesis. It includes examples from the professional groups in a municipality, where Arts and Crafts teachers work systematically to develop their own proficiencies in cooperation with other teachers in the discipline. The purpose of this study is to underscore the importance of strong professional communities in strengthening design proficiencies in primary and lower secondary schools. Research shows that Arts and Crafts educators find networking and professional groups very useful for enhancing their own engagement and competence.

Keywords: Design education, communities of practice, competence building, academic networking groups, Arts and Crafts teachers.

1 INTRODUCTION

The quality of design education offered in primary schools onward cannot be emphasised enough in the goal to strengthen the future of design proficiencies in Norway and foster sustainable design development. In Norwegian primary and lower secondary schools, the subject of Arts and Crafts is intended to advance design knowledge amongst students, with design being one of the main focus areas in the core curriculum. An example taken from the concrete goals stated in the Norwegian curriculum indicates that students should be able to *design products based on a specification for form and function and describe the life cycle of a product and assess implications for sustainable development, environment and utility* (my translation from Norwegian [1]. Students' techniques and skills, as well as their interest for design, must be developed early so that they are able to acquire essential knowledge on the subject. Teachers should possess the educational background and expertise in the design area to ensure quality in instruction. Strong professional communities, together with a common understanding of the subject area, are essential. Collaboration amongst course teachers of design education in and across schools is important for the development and progression of the subject.

This paper is based on my Master's degree dissertation *Professional Groups for Teachers of Arts and Crafts–Content, Organization and Utility* [2], touches on the subject of academic networking groups for teachers of Arts and Crafts. The reflections are in many ways based on my own experience as a group leader for the networking group in Skedsmo municipality. The topic of this dissertation is: *What content can academic networking groups for Arts and Crafts teachers include, how can such groups be organized and what can the usefulness be for its members.* I compare networking groups in two municipalities where four informants from in each municipalities give time and space to continued education via participation in academic groups, and how they prioritize further education for Arts and Crafts teachers. The purpose is to shed a light on the academic community and relevant continued education for Arts and Crafts teachers in order to strengthen the meaningfulness of the job we do. To be able to collaborate with others in the same profession, address foundational problems in the field and grow professionally, independent of how much relevant education we have, is important for teachers who teach this subject. A strong sense of professional community can contribute to a stronger

discipline and increased acknowledgement of Arts and Crafts as a school subject [2:8]. Reflexive methodology and qualitative interviews are used as methods in the dissertation.

2 RESEARCH

Research in the area of arts and crafts highlights challenges involving the lack of cooperation between teachers of the subject, whereas other studies illustrate the advantages of forming professional networks and establishing collaboration [2]. Eva Lutnæs has written on collaboration in her doctoral thesis entitled, Final Evaluation Grades in the Subject of Arts and Crafts—The Teacher's Bargaining Repertoire (my translation from Norwegian). In her study, she examines two teams of teachers, with a focus on how they collaborate in giving students' final grades; Lutnæs finds that no requirement for collaboration exists when teachers give grades for the subject [3]. Reflections from her thesis reveal that teachers who collaborate have a more developed vocabulary in both explaining and clarifying the reasons behind the final grades they give. Catrine Lie's master's thesis in 2013, School Leadership's Evaluation of Teachers' Subject Proficiency in Arts and Crafts (my translation from Norwegian), addresses the issue of school leadership prioritising the hiring of teachers educated in the field of arts and crafts, as well as what statements have been conveyed in relation to this. Lie touches on Arts and Crafts teachers' teaching load, or their number of teaching hours, which is greater than the teaching load of teachers for other subjects in Norwegian schools. She refers to Arts and Crafts teachers as a part of a collegium, and describes the effects these teachers associate with collaboration and interdisciplinary work. According to Lie, the interviewees emphasised that being at least two teachers in the arts and crafts subject contributes much to their job satisfaction and professional development [4]. In her master's thesis, Formal Professional Competence in Arts and Crafts-Meaning, Prioritizing and Consequences (my translation from Norwegian), June Kunnikoff writes that she consciously chooses not to use much time herself on her professional network; however, she emphasises that it is something important to the participants of her research [5]. Kunnikoff's study takes its starting point from statistics cited by Lagerstrøm from 2013/2014, in which almost half of those who teach Arts and Crafts have no formal education in the subject [6].

After having spoken with all five informants, I see in the transcripts that everyone speaks warmly about the professional collegium they have at school, and I get the impression that everyone places value on professional networks in different arenas. To varying degrees, collegiality is mentioned in schools, professional network meetings in the municipality, professional conferences, groups in different forms of social media, and the didactic journal FORM as valuable for professional development and teaching (my translation from Norwegian) [5:56].

Marit Garberg sheds light on the progress and development of the local curricula in her master's thesis, *Plans, What and Why?* (my translation from Norwegian). She points out the lacklustre collaboration between schools and the lack of a guarantee that further education in the subject will be offered to Arts and Crafts teachers.

From my perspective and with my experience in the field, little collaboration exists among and between primary schools and lower secondary schools when it comes to the subject of Arts and Crafts, in contrast to subjects, such as Norwegian and Mathematics, in which established collaboration exists between primary and lower secondary schools. Here, I refer to schools that belong to the same school grouping (my translation from Norwegian). [7:15].

The Kjosavik report in 2003 emphasises that Arts and Crafts, as well as design teachers in primary and lower secondary schools collaborate less than general teachers in primary schools do [8]. The reason for this can be complex: Arts and Crafts teachers are alone in the discipline in schools because of the total number of class hours that students are required to have, students have few arts and crafts classes in schools, or the teachers are more focused on the uniqueness of the discipline and on their field of study [2].

DesignDialog [9] is an example of a national network with over 50 researchers within the field of design education in tertiary sector. Although this is a research network, they are working with issues that can be linked to primary school as they focus on Design competence from kindergarten to doctorate [2].

3 PROFRESSIONAL GROUPS IN THE MUNICIPALITY OF SKEDSMO: AN EXAMPLE OF SYSTEMATIC COOPERATION IN THE SUBJECT OF ARTS AND CRAFTS

The professional group of Arts and Crafts teachers in Skedsmo municipality is an example of how teachers' professional collaboration across schools can contribute to strengthening the teaching of design to students. This professional group is also an example of how an academic community can participate in developing teachers' expertise and strengthening the feeling of effectiveness in relation to the work they do. I, myself, have been a member of this group since 2008; I took over as the group leader in 2013.

3.1 Content and Organisation

Professional groups (Faggrupper) in Skedsmo were started as a collaboration between Høgskolen i Oslo (Oslo University College) and the municipality of Skedsmo in 2003 by Unn Stålsett, an associate professor at the University College, and Inger Elise Solberg, a senior advisor for the municipality of Skedsmo. This town has professional groups for every subject taught in schools. These professional groups, or networks, as Stålsett describes them in her book Veiledning i en lærende organisasjon (Guidance in an Organization that Learns, my translation from Norwegian) [10], serve as a venue where members can share experiences, use one another's knowledge through discussions and be open about the challenges experienced in their disciplines. Such groups are not meant to be courses in which the participants are passive recipients; rather, everyone is expected to contribute his/her own knowledge. Teachers meet their groups five times a year for three hours per session (1 PM to 4 PM). The school day of students, which is until 12 noon, is structured on the basis of teachers' planned proficiency development time. Some examples of what we do in the professional groups are discussions, relevant political work, workshop activities, excursions, evaluations and receiving visits from external professional speakers. The groups also collaborate with the Oslo University college on the guidance of newly educated teachers through EIK, which is the entity for innovation and professional development by the Institute of Art, Design and Drama at Oslo and Akershus University College of Applied Sciences. The theme has been assessment-practices.

3.2 The Focus on Prepared, Sustainable Design Proficiency

One of the group's main focuses in recent years has been continuous development and competency in relation to design and crafts. In this regard, the group has worked in cooperation with Skedsmo videregående skole (an upper secondary school) in a project called *A New Pathway to Crafts*. Together, we designed and made a chessboard and other products made of a variety of wood materials. The focus has been on developing the design process, as well as quality assurance, in relation to knowledge of tools, areas of application and an understanding of how we teach our students the importance of sustainable materials and techniques. The high dropout rate of students is widely known, and only a few choose to study design and crafts. By collaborating with Skedsmo videregående skole and focusing on design and crafts in primary and lower secondary schools, we hope to contribute to increasing the interest in design and crafts studies in high school. Strengthening the teaching of the subject from as early as the first grade in primary school is thus important. We also wish to collaborate with regard to the use of local materials so that sustainable development can be promoted. We will continue to work on these issues in a systematic way in the years to come, and only time can tell if our initiatives will result in improvements.



Figures 1 and 2. Designing the chessboard as a team

After the course at Skedsmo videregående skole, the group helped in an activity at Bråtejordet lower secondary school in Skedsmo to develop design and handcraft competencies. Two of the group members who work in this school helped guide the design process, and everyone in the group could choose if he/she wanted to work with ceramics or wood. While we worked, we had many educational discussions about tools, techniques, design development, processes and evaluation.



Figure 3. Mallet

Our group has yet to use additional new technologies in developing good and sustainable design lessons. Because the subject of Arts and Crafts is central in learning about and focusing on design, entrepreneurship and innovation, technological programs and solutions should be created, and we should be able to work with other disciplines and subjects, such as technology and mathematics. We will work deliberately towards achieving this goal, as we further develop plans for our professional group.

4 COMMUNITY OF PRACTICE AND THE BENEFIT OF SYSTEMATIC COOPERATION

The professional groups in Skedsmo for teachers' improved design practices can be related to Etienne Wenger and Jean Lave's theories on communities of practice and research on school development [11] on the basis of the following characteristics: (1) mutual engagement, (2) common activities and (3) common repertoire. Based on these three features, the professional groups in the municipality can be defined as communities of practice. The groups consist of teachers who teach the same subject, and they can choose which professional group they like to join (1). Everyone works for the same municipality, which has a common proficiency development program for all schools (2). More or less, teachers use common terminologies in their teaching and subject area (3). Several researchers in the field of design and teaching practices use Wenger's theories on communities of practice and on how people learn together in groups. Wenger co-developed the book entitled, Cultivating Communities of Practice [12], which focuses on how people can systematically use communities of practice to develop businesses. On this subject, notably, the Norwegian Minister of Education spoke at the Arts and Crafts Conference at Oslo and Akershus University College of Applied Sciences in 2017 [13], where he stated that the academic community should be strengthened and systematised for the betterment of this field of study. Thomas Nordahl, Norway's foremost academic on school development, underscores that systematically working with others to address challenges in schools is the most important factor

that affects school development [14]. Erling Lars Dale promotes the establishment of a collegial community as a condition to strengthen the professional quality in schools. Dale writes that if teachers want to experience meaningful cooperation, they should have a collective identity that is in accordance with their frame of reference [15]. These ideas can be linked to Stålsett's theories on network building and Wegner's theories on communities of practice. Working over the long term, communities of practice, such as professional groups and networks that have a strategic plan to develop teachers in, for example, design in primary and lower secondary schools, will be important in strengthening the area of design and ensuring the competencies of both teachers and students.

Wenger stresses the importance of long-term communities of practice. He writes that these communities are not primarily meant as a source of quick solutions to problems. They should not replace the team or other parts of an organisation; rather, they should contribute value to the organisation and its members. Wenger, McDermott and Snyder [12] classify communities of practice into short- and long-term ones. Short-term communities of practice serve as a venue for problem solving, as they provide quick answers to questions, help improve the quality of decisions and provide greater perspectives on problems. By contrast, long-term communities of practice require the ability to execute a strategic plan, form knowledge-based alliances and establish a forum that facilitates the expansion of skills and expertise [10].

As Kjosavik's [8] report shows and as many others express in different forms of social media, Arts and Crafts teachers often work independently in schools. Many miss the opportunity to develop themselves professionally with others, as well as to obtain help and advice. This situation can be related to the fact that only one-half of those who teach Arts and Crafts are educated in the subject, although many are teachers with educational backgrounds in other subjects. If we browse through Facebook groups and other forums on the Internet on the topic of design and arts and crafts, we can see the presence of these groups in connection to Wenger's theories on short-term value communities. They become venues for providing quick solutions because group members can easily ask for help and advice. These groups are certainly useful, but teachers should still develop themselves over time, with a plan for sharing and strengthening their knowledge foundation in a group, in order to form strong academic communities.

4.1 Relevant Development Time and Purpose

Evaluations of professional groups in the municipality of Skedsmo show that group members are quite satisfied with them [2]. Many teaching professionals partake in further education and professional development. Much of teachers' work week also includes focusing on professional growth and participating in courses. Arts and Crafts teachers have stressed that much of the time they commit to professional development is largely irrelevant because the main focus is usually the subjects of Mathematics, English, Norwegian and PISA (Programme for International Student Assessment). As a fellow teacher said in an interview I conducted for my master's thesis, When I began working here, I sat in these development meetings and felt that they did not have anything to do with me. Occasionally, I was able to skip them, but it is more important that the meetings are relevant rather than I get to skip them [2:72]. The interviewee also stated that when people from the municipality come to give courses, they often try to 'sell' the course to her by saying that it is also relevant to Arts and Crafts. I, myself, know that being a part of a network of people who have the same education and job as I have, who use the same terminologies and who experience the same challenges, makes me, to a larger degree, feel the usefulness of taking a course in other subjects or with other focuses. I am able to make the content more relevant to my own field of study. I am motivated, and I feel my purpose by being able to discuss and meet with others who also teach Arts and Crafts. The participants whom I spoke with for my master's thesis shared the same opinions. These practices can be related to Wenger's theories on negotiation of purpose [11]: to engage oneself, one must experience and appreciate the purpose of what he/she does.

5 CONCLUSION

This study focuses on the importance of systematic cooperation between teachers who teach design in primary and lower secondary schools in a municipality. Creating a good foundation for students early on can be achieved by having sufficient time to develop proficiencies and developing one's field of study in collaboration with others; teachers and institutions. If students were to experience progress in schools in the municipality and if the quality in the teaching of design were to be improved, teachers

must have a common understanding and knowledge of the standards of good teaching so that students experience progress in schools and the quality of design teaching is improved. In addition to collaboration between schools, teachers in the field of design should work together with colleges and other institutions, as well as acquire relevant research insights into the field. This practice is linked to the ideas of theorists and researchers, such as Etienne Wenger, who writes on how people can create communities of practice, and Erling Lars Dahle and Thomas Nordahl, who present the important factors that affect school development. The area of design and education should work together to strengthen the future of design and maintain interest in the field, starting from primary schooling through higher education.

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