Regimes of competence in the subject Art and crafts

Eva Lutnæs

This article explores the assessment repertoire of art and crafts teachers at two different lower secondary schools in the context of an on-going reform of assessment practice in Norwegian general education. New regulations have put pressure on the assessment vocabulary of teachers in all subjects as teachers now are expected to make rubrics articulating low, medium and high achievement levels. Developing assessment criteria at three different achievement levels is by large a linguistic exercise in which each subjects' repertoire of quality descriptors is tested, (e.g., does the verb "copy" signify a higher level of achievement than the verb "imitate"?). My PhD fieldwork came to an end before the rubric trend began and was analysed as the reform evolved. What struck me as I analysed the assessment repertoire of art and crafts teachers was that the big picture of capability in the subject appeared to be unsettled. With a reform aiming towards more subject-related and fair assessment practices, it seemed a paradox to encourage teachers to make detailed assessment criteria of goal achievement, prior to a debate on the components of the bigger picture of capability. This article outlines four different visions of art and crafts education and their regimes of competence as a tool to discuss aims, content and assessment evidence.

Keywords: Assessment evidence, visions of art and crafts education, art and crafts teachers

Introduction

A trend has spread across the schools of Norway: teachers make rubrics articulating expectations at low, medium and high achievement levels. Rubrics with levels of achievement are used as a tool to meet new regulations on individual assessment (Kunnskapsdepartementet, 2010). The new regulations are launched as part of an on-going reform of assessment practice in Norwegian general education. Developing assessment criteria at three different achievement levels is, by large, a linguistic exercise in which each subjects' repertoire of quality descriptors are tested, (e.g., does the verb "copy" signify a higher level of achievement than the verb "imitate"?). Before the rubric trend began, I conducted PhD fieldwork exploring the assessment repertoire of art and crafts teachers at two different lower secondary schools. The agenda of my PhD project, *Final grades in the subject Art and crafts. The assessment repertoire of teachers* (Lutnæs, 2011), was to explore what teachers valued after ten years of compulsory education in the subject Art and crafts. I analysed their repertoire as the national assessment reform evolved. I found a disturbing contrast between the reform's attentiveness to details and the unresolved questions of relevant assessment evidence: What is valuable knowledge in the subject and how can pupils demonstrate that knowledge? It struck me, as I analysed interviews and teachers' negotiations of final grades that the bigger picture of capability in the subject appeared to be unsettled. To get top grades, do pupils only need to make objects, or do they need to accompany those objects with knowledgeable criticism? Likewise, can pupils get top grades by making exact copies of the teacher's model, or do they need to explore the repertoire of other makers for solutions to redesign themselves? These questions make quite a difference to pupils. In this article, I will revisit my PhD thesis with the scope limited to verbal versus visual assessment evidence. I question whether the assessment reform aiming towards more subject-related and fair assessment practices has started at the wrong end by focusing on details prior to a debate on the bigger picture of capability. Drawing upon my study of historical texts (1930-ff) that describe teachers' assessment practice and assessment criteria, I outline four different visions of art and crafts education and their regimes of competence as a tool to discuss aims, content and assessment evidence.

Techne Series A, *20*(3), pp. 76– 87

Final grades in the subject Art and crafts

The final grade given in the subject Art and crafts equates with the grades given in subjects such as English, science and Norwegian in the certificate awarded to all pupils when they leave their ten-year compulsory schools. The grades that teachers use range from 1 to 6, with 1 being the lowest grade and 6 being the highest. The current curriculum, Knowledge promotion (Kunnskapsdepartementet, 2006), provides learning objectives, but does not state expected levels of achievement as is done in, for example, Sweden and England. The development of assessment criteria that echo the complexity of the main subject areas of visual communication, design, art and architecture, is part of each teacher's professional responsibility. Ever since the beginning of art and crafts as a compulsory school subject in 1889, one of the teachers' statutory duties has been to assess their pupils' performances. My close reading of textbooks for art and crafts educators (Haabesland & Vavik, 2000; Lowenfeld & Brittain, 1971; Nielsen, 2009; Nordström & Romilson, 1972) and the Norwegian journals for art and crafts teachers, Forming (1949−1973) and Form (1967−ff), reveals few attempts to present and discuss what might be subject-relevant assessment criteria. Thus, teachers have been forced to make the best out of the situation and develop assessment tools and criteria themselves, and, as Åsmund Lønning Strømnes described the situation in 1963, "it is the teachers' private and difficult dilemma" (Strømnes, 1963, p. 12). What is the situation 50 years later?

Regardless of scale, teachers tend to locate grades in the middle, states Richard Kimbell, who describes this as, "one of the truisms of school life" (Kimbell, 1997, p. 40). Yearly national statistics of grades given in the subject Art and crafts confirm such assessment practices (Nielsen, 2000; Scheibler, 1982). Kimbells explanation for this phenomenon is that, no matter how bad a work by a pupil is the teacher can always imagine worse, and vice versa. He describes three strategies used to aid teachers in their use of the scale: "We can develop *criteria* to help to identify quality. We can assemble sets of *exemplar* work to illustrate quality. And we can develop a *moderation* process that helps to share concepts of quality" (Kimbell, 1997, p. 40). The Norwegian Ministry of Education and Research implements none of these strategies. The final grade in the subject Art and crafts is negotiated locally by pupils' own teachers. When teachers decide on final grades, they have no sets of exemplar work or assessment criteria to guide them. There are also no requirements for cooperation between schools, which could facilitate moderation processes through meetings of teachers to discuss levels of achievement and assessment criteria, develop shared concepts of quality and gain confidence in their own assessment practices. In my PhD study, the assessment vocabulary of art and crafts teachers came to be a main focus, which grew more relevant due to an on-going reform of Norwegian teachers' assessment practice.

The tail of underachievers

I began my PhD candidacy in 2006. At that time, a reform initiated by the Ministry of Education and Research was in its first phase. Its aim was to improve assessment practices in Norwegian schools. The reform had its origin in a governmental vision; education is regarded as a tool to reduce differences in society. A national goal and overriding principle is to provide equal opportunities in education regardless of abilities, age, gender, skin colour, cultural background, place of residence, parents' education or family finances. Everyone should have the same opportunity to develop themselves and their abilities (Norwegian Directorate for Education and Training, 2008). An Organisation for Economic Co-operation and Development (OECD) report published in 2005 concluded that the Norwegian compulsory school system produces a tail of underachievers. In comparison with international peers, 15-year-old Norwegian pupils underachieved, and one reason suggested was that Norway has a culture in which children are under-challenged:

> We believe that one of the reasons for underachievement at age 15 may be the predominance of a culture in which children are under-challenged. We have been impressed by the quality of care provided for children, the emphasis on social development and the priority given to out-door play, but worry that expectations about intellectual development are too low (Mortimore, 2005, p. 52).

To know whether a pupil is falling behind, teachers need tools to monitor pupils' learning progress. As a means to change the culture in Norwegian classrooms, the OECD report recommended clearer subject standards in the curriculum and the establishment of a research project to consider the implementation of age-related subject benchmarks. The portrayal made by the OECD report was supported by research. There was a lack of subject-related feedback in Norwegian classrooms. Stars, smileys and comments such as "good" and "nice work" were commonly given without subject-related information on progress and achievement (Dale & Wærness, 2006; Furre, Danielsen, Stiberg-Jamt, & Skaalvik, 2006; Klette, 2003). This was considered to be a threat to the vision of equity in education, since unclear, diffuse and implicit assessment criteria are more easily decoded by pupils with highly educated parents (Norwegian Ministry of Education and Research, 2006, p. 7).

As a solution, the Ministry of Education and Research launched an assessment reform seeking to facilitate more subject-related and fair assessment practices. The research project recommended by the OECD report was established with the optimistic title "Better assessment practice". Its mission was to give the Ministry of Education and Research an answer to the question of whether age-related subject benchmarks ought to be implemented or not. The benchmarks were called *assessment criteria of goal achievement* and surfaced as rubrics articulating expectations at three achievement levels: low, medium and high. However, the assessment criteria developed as part of the research project were not applauded as functional descriptors of pupils' performance quality by the participating teachers. Briefly described, the ambition of implementing national assessment criteria in all subjects was reduced to the development of voluntary criteria of goal achievement in four subjects (Utdanningsdirektoratet, 2009, p. 25).

Curricula in terms of evaluation

National assessment criteria of goal achievement were not implemented, but if you visit a lower secondary school today, you are likely to find an extensive use of rubrics similar to the ones tested in the research project. A trend has spread across the schools of Norway: teachers make rubrics articulating expectations at low, medium and high achievement levels. In fact, the teachers have ended up developing the rubrics that the Norwegian Directorate for Education and Training was supposed to provide. Such rubrics are used as a tool to meet the new regulations on individual assessment (Kunnskapsdepartementet, 2010). In August 2010, the Norwegian Directorate for Education and Training published a 95-page document to guide teachers in their understanding of the new regulations. The guidelines stressed that teachers should explain to pupils what each level of performance equates to in terms of grades (Utdanningsdirektoratet, 2010a, p. 9). In a brochure that was sent to all lower secondary schools in Norway, criteria of goal achievements are suggested as a solution to meet pupil rights (Utdanningsdirektoratet, 2010b, p. 12). The new regulation has put pressure on the assessment vocabulary of teachers in all subjects, who are challenged to express their curricula in terms of evaluation (Lundgren, 2006, p. 12). Two sets of assessment criteria published in the Norwegian journal of art and crafts teachers, *FORM*, illustrate the changes:

2001

Assessment criteria

1. Creativity in design
2. Functionality
3. Craftsmanship

Andersen, D. (2001). Something to sit on. *FORM. 35*(2), 24–25

2010

Local objectives	Criteria of goal achievement		
	Low competence	Medium competence	High competence
Make a photograph	I can make a photograph of a jump with a pre-adjusted camera	I can adjust the camera and photograph a jump	I can choose adjustments on the camera and make a photograph of a jump that emphasises speed and action
Manipulate pictures in Photoshop	I can use the lasso tool to separate the jumper from the background put the jumper into an artwork talk about some of the tools that I used in Photoshop	I can combine the lasso tool and the magic wand to separate the jumper from the background with accuracy adjust the size of the jumper, position, colour and contrast to match the artwork describe how the tools that I have used in Photoshop work	I can separate the jumper from the background with great accuracy manipulate the picture of the jumper to underline the visual elements in the artwork explain my choices of tools and adjustments in Photoshop
Talk about elements and principles of design	I can point at some similarities and differences concerning visual elements in the artwork and the manipulated photo	I can describe some similarities and differences concerning visual elements in the artwork and the manipulated photo	I can explain my choices of visual elements in the manipulated photo
Moe, E. (2010). Jump – manipulating an art-work. *FORM*, *44*(3), 16–17.			

Figure 1: Assessment criteria published in FORM, a Norwegian journal of art and crafts teachers. The assessment criteria from 2001 are a list of keywords indicating the aspects on which teachers will focus. The assessment criteria from 2010 give a detailed description of expectations at three different achievement levels related to three local objectives.

Subject-related and fair assessment practices

The assessment criteria of goal achievement rest on the assumption that, by comparing each pupil's work with detailed descriptions of quality, teachers can conduct subject-related and fair assessment practices. The details provide an accurate profile of pupils' competence and thus a fair assessment. However, research on assessment in the English subject technology (Kimbell, 1997, p. 92) and the Dutch subject visual arts (Schönau, 1996, p. 174) debates this approach to assessment by concluding that fair assessment is better secured by starting with the global impression. Kimbell stressed: "All our research evidence suggested that sound assessment resulted from a sequence of activity that started with 'big pictures' of capability and moved through progressive stages into the detail" (Kimbell, 1997, p. 92). What struck me as I analysed the interviews and negotiations of final grades from two different schools was that the big picture of capability in the subject Art and crafts seemed unsettled. With a reform seeking more subject-related and fair assessment practices, it seemed a paradox to encourage teachers to make detailed assessment criteria of goal achievements, prior to a debate on the components of the bigger picture of capability. Questions left for the teachers to answer are: What should be regarded as valuable knowledge? How should pupils demonstrate their competence, and which assessment evidence should be considered more important? In the context of art and crafts education: What value should objects made by the pupils have compared to their spoken or written statements? Do pupils deserve top grades if they demonstrate the ability to transform wood, clay or textile into beautiful objects, but lack the language to describe what makes their work successful? How should craftsmanship be valued compared to the process of developing design solutions? Could pupils get top grades by making exact copies of a model pre-made by their teachers, or do they need to explore the repertoire of prior makers for solutions to redesign themselves? To represent the unsettledness regarding what comprises the question of the bigger picture of capability in the subject Art and crafts, I revisit my PhD fieldwork amongst two teams of art and crafts teachers negotiating final grades in the subject.

Locally negotiated regimes of competence

I chose to do fieldwork amongst two teams of best practice art and crafts teachers (School A and B). The concept of best practice refers to profiled, educated, experienced and admired teachers. The fieldwork was limited to the teachers' negotiation of the final grades, summing up pupils' achievements after ten years of compulsory education in the subject Art and crafts. I was in the midst of the teachers' assessment practices for nearly two months, attending their meetings, listening to their negotiations, conducting interviews and collecting the assessment tools they used. This combination of methodology was chosen to thoroughly document the challenges and dilemmas of assessment in the subject and the vocabulary and strategies teachers draw on to solve them. The discussion in this article has evolved from group and individual interviews and addresses only those questions concerning verbal versus visual assessment evidence. I analysed the two teams of teachers as communities of practice and locally negotiated regimes of competence (Wenger, 1998) and focus on their assessment repertoire. Etienne Wenger makes a distinction between the repertoire members of a community of practice have produced and the repertoire they have adopted (Wenger, 1998, p. 83). When assessing the work of their pupils, teachers can draw upon the history of their profession and thereby adopt earlier solution strategies and concepts used as descriptors of quality. They also have their own history of negotiations to reuse as a repertoire when they face similar dilemmas of assessment (e.g., What grade should they give products they suspect to be finished by a parent or to a product half-finished due to a long period of truancy?). These histories of interpretation create shared points of reference, but, as Wenger states, "they do not impose meaning" (Wenger, 1998). As a resource for the negotiation of meaning, the repertoire remains inherently ambiguous; ambiguity is a condition of negotiability. Teachers negotiate what part of history to make "newly meaningful" (Wenger, 1998, p.

137) when assessing pupils' work within their local school context and current national curricula. On the one hand, ambiguity makes negotiations of quality in pupils' work more difficult, while on the other hand, it legitimises the connoisseurs, educated art and crafts teachers who know the repertoire of their practice. By choosing a best practice approach, I conducted my fieldwork amongst the connoisseurs (Eisner, 2002, p. 187, Freedman, 2003, p. 150). Their way of solving dilemmas of assessment in the subject documented the professions capability at a critical moment, when reform was knocking on the doors of our classrooms.

The status of verbal versus visual assessment evidence

Throughout the fieldwork, the question of visual versus verbal assessment evidence heated the discussions. It surfaced as the most controversial topic in the assessment process and made experienced teachers at both schools raise their voices and use expressions such as "battle", "fight", "kills the pupils' flow". It even led to a forceful clash between two teachers in a group interview with different visions of art and crafts education. My first encounter with the topic as controversial was in the pilot study I did to adjust my focus and research questions to the everyday challenges of assessment in the subject. I visited four students in teacher training (S1-4) and their mentor teacher (MT) in a secondary school and witnessed their disagreement regarding the value of an excellent picture and the value of visual assessment evidence:

> S4: What if the picture is excellent, then it can't be a low grade?
>
> MT: The pupil needs to know why; it can't just be good by luck
>
> S3: But shouldn't a pupil that intuitively uses the elements of design correctly – shouldn't that count?
>
> MT: Still, it would be a low grade. Have to demonstrate knowledge

This dialog directly addresses the questions of relevant and valid assessment evidence in the subject Art and crafts. What counts as a demonstration of knowledge? Can a made object demonstrate pupils' knowledge without any supplementary information? The mentor teacher says no; the picture could be good by luck. In the mentor teacher's opinion, if the pupil cannot explain why it is excellent, the pupil's achievement has the value of a low grade. The mentor teacher gives superior status to what Leslie Cunliffe (2005) addressed as the assessment evidence for "knowing that" (written or spoken forms of reporting). The student teachers object to this; they would like to acknowledge the made objects with independent value, as knowledge shown or demonstrated, which is what Cunliffe described as assessment evidence for "knowing how". The distinction between "knowing that" and "knowing how" is widely debated both within the field of art and crafts (Brænne, 2011; Dormer, 1997; Nyrnes, 2008) and as the dualism of mind and body in the field of philosophy. Peter Dormer claimed, "nothing that is important about a craft can be put into words and propositions. Craft and theory are oil and water" (Dormer, 1997, p. 219), and the philosopher Gilbert Ryle states: "knowledge-how cannot be defined in terms of knowledge that" (Ryle, 1971, p. 215).

No words necessary

While conducting fieldwork amongst two teams of experienced teachers at lower secondary education (School A and B), I tuned my attentiveness into how the teachers went about assessing "knowing how" versus "knowing that". I found that they approached the statuses of visual and verbal assessment evidence quite contrarily to the mentor teacher at the level of secondary education. They all regarded

the made objects as the main assessment evidence. Objects such as sketches and products, results of making, were considered as valid and independent documentation of students' knowledge in the subject. Spoken or written statements were rare, and as assessment evidence, they seldom affected grades in the subject. As one teacher stated in an individual interview at School B, you can judge whether a pupil has understood or not by looking at the product. At School A, the team of teachers explicitly stated that they wanted the subject to be a counterweight to theoretical subjects such as science, math and Norwegian. They did not want art and crafts to be just another subject in which pupils write a lot. To this end, they had chosen to set aside 1/3 of the learning objectives in the curricula – those that require verbal assessment evidence through spoken or written forms of reporting (Kunnskapsdepartementet, 2006). One of the teachers explained that her students expected to make something in art and crafts classes. Seemingly, the pupils supported her "no time for theory" approach to the subject. In the individual interview, I asked her colleagues the extent to which elements and principles of design were part of her teaching. Provoked by my question, the teacher answered:

> … I get them going by things that are not text and words. The pupils can adopt concepts without expressing them by words. (…) I demonstrate the use of elements and principles of design to the pupils when I give them feedback. I do not say things such as 'these are the laws, now you can manipulate with them'. I rather provide alternatives and visualize the law (Lutnæs, 2011, p.214)1

The teacher passed on her knowledge as a connoisseur by providing a variety of samples and pointing out differences (Dormer, 1997, p. 226) to the pupils. In the interview, she stressed that what matters is that the made objects document the use of concepts, not that the pupils know "nice words". The "nice words", theoretical knowledge about elements and principles of design, remained the teacher's sole domain. The pupils knew how to replicate visual models in their own designs, but they did not know the theoretical knowledge on which the teacher's samples were based. Learning-by-watching, a concept developed by Janne B. Reitan (2007), seemed to be this teacher's main strategy. Bent Illum and Marlène Johansson (2012, p. 10) described situations of "silent knowledge transfer," in which a teacher assessed the results of the softening of copper based on his embodied experience and offered the pupils a physical experience of the material as it changed. The pupils learned what is "soft enough" by thinking with tools and materials. As I see it, Illum and Johansson's description of how knowledge on materiality transfers, adds learning-by-touching as a relevant aspect of art and crafts education. Both modes of learning are included when Karen Brænne (2009) discussed visual- and action-based learning in her PhD thesis. Brænne addressed how concepts of quality are communicated by the ways in which teachers act and create alongside their pupils and by the visual models they choose. Taking the stance opposite the mentor teacher with regards to the importance of verbal assessment evidence, one could claim that words are not necessity in art and crafts education. According to the educational practice at School A, pupils can imitate long-used conventions and make beautiful objects without knowing theories or having the words to see, describe and discuss the practices they work within. Later, the teachers can assess whether pupils have adopted the expected repertoire by looking at their products and writing down the grades. This could be a wordless process of demonstrating, observing and making, culminating in the pedagogical gaze of a connoisseur.

Intuition and understanding

Visiting School B, I got the impression that this team of teachers considered verbal assessment evidence far more important than the teachers at School A. In their assignments, they asked pupils to demonstrate theoretical knowledge by describing and evaluating their work in portfolios. In an individual interview, one teacher stated top-level students as those who can be critical of their own

[1] Quotes from teachers in this article are linked to page numbers in my PhD thesis with the same quote. This makes it easier to trace how I discuss the teachers' assessment repertoire in the thesis and give the reader access to a more detailed description of the interview dialog and the situational context of the quote.

product and process. In other words; "they need to understand what they are doing" (Lutnæs, 2011, p. 211). This teacher's colleague stated, "I really stress what the pupils are saying – if that diverges from what they have done, it will be rather poor (…) It will decrease the grade by almost a whole level. Because then you have not understood that the color is blue" (Lutnæs, p. 212). Both teachers convey an assessment practice that emphasizes the coherence of doing and criticism, that is, pupils' made products and their verbal statements. In a group interview (Lutnæs, p. 215-218), I asked the team at School B to describe what they valued concerning the assessment criteria for creativity in their assignments on contemporary art. We discussed the status of visual versus verbal assessment evidence, and I asked whether pupils could demonstrate their understanding of elements and principles of design by making objects. One teacher replied that students needed to demonstrate understanding by words. A second teacher continued and explained why theoretical knowledge is made part of their teaching in art and crafts: pupils learn concepts that make them capable of reflecting upon their doing. The teacher explained that pupils could use elements and principles of design intuitively prior to teaching, since what we perceive as beautiful or ugly is part of our culture.

A third teacher interrupted her colleague to secure the researcher's understanding of the team's assessment practice and stated, "Pupils are acknowledged for their intuitive use, but they do not get a full score" (Lutnæs, 2011, p. 216). I tested my interpretation of their assessment practice by asking, "So, to get a top grade, you need to make an excellent product and be able to explain why". The teachers all agreed to this. At the end of the interview, I asked the teachers which of their six assessment criteria they considered most important. There, the consensus scattered. One teacher revealed her doubt in the importance of verbal assessment evidence. She explained it to be difficult to lower a grade when the product is excellent due to her vision of the subject Art and crafts as "not a theoretical subject" (Lutnæs, p. 217). This line of reasoning made another teacher, who saw her colleague's vision of the subject as one belonging to the past, furious. As the more experienced art and crafts teacher, she argued that theory is necessary as means to, "open the hatches" and make pupils aware of how their made objects are rooted in the world outside the workshops, in long traditions of our culture and other cultures (Lutnæs, p. 218). Pushed into a corner, the teacher in doubt accepted the counterarguments and promised to never reopen the discussion on theory as part of the subject again.

In the later individual interview, the teacher in doubt repeated her opinions about the verbal assessment evidence: "When it comes to art and crafts, I am convinced that you do not need much basic knowledge to make a fantastic visual expression. My experience is that they understand, although they cannot put the words right when they write their report and conduct self-assessment" (Lutnæs, 2011, p. 213). Similar to the teachers at School A, she considered visual assessment evidence a valid documentation of pupils' understanding. Verbal assessment evidence was not important. Her vision was of a subject that could come to the aid of the visual talents of pupils that do not easily cope with the theoretical demands of education. This line of reasoning echoes the legitimizing of the subject Art and crafts as a counterweight to theoretical subjects (Bakke, 1973; Forsøksrådet for skoleverket, 1960, p. 289). In the group interview at School B, two teachers negotiated what part of history to make "newly meaningful" (Wenger, 1998, p. 137) when assessing pupils' work within their local school context. The reasoning of the more experienced teacher was in line with the current national curricula and was supported by two out of the three colleagues in the team. Still, when I closely examined all the final grades at School B from that year, it was hard to find cases in which the verbal assessment evidence had any real impact. Even though the teachers regarded theoretical knowledge as a part of their subjects' legitimization and as a means to foster understanding of the conventions they used and adopted intuitively from the visual culture of their daily lives, they all seemed to hesitate when it came to grading. The verbal assessment evidence was taken into consideration only when teachers were uncertain about which grade to put on visual assessment evidence; however, it had no weight on its own.

Visions of art and crafts education and assessment evidence

The question of relevant assessment evidence is an educational battle on the content and aims of the subject at an ideological level (Goodlad, 1979). Assessment evidence represents a continuum of the answers given to core educational questions, such as: What knowledge and capabilities should the subject Art and crafts promote as part of general education, and why and how? It is both straightforward and complex, since different visions of art and crafts education call upon different assessment evidence. Below, four different visions of art and crafts education and their correlated requirements for assessment evidence are outlined. The descriptions are based on the diachronic profiles I constructed to trace the historical roots of experienced art and crafts teachers' assessment repertoire (Lutnæs, 2011, p. 47-80). The diachronic profiles were identified by close readings of historical texts (1930-ff) that describe teachers' assessment practices and assessment criteria. I draw upon Brænne's (2009) four diachronic profiles and construct descriptions closer to the assessment of pupils' making.

Aim of education	***Educational content***	***Assessment evidence***	***Knowing how/ knowing that2***
1. Craftsmanship and skilful workers	Copy the teachers' progressively more challenging models as a means to learn practical and cognitive skills along with work discipline and diligence	Made objects which replicate the teachers' instructions and the use of tools and materials in the workshop. (Self-assessment)	Knowing how (knowing that)
2. Foster aesthetic sensibility	Learn how to recognize and appreciate specific visual qualities, elements and principles of design and to replicate them	Made artefacts that replicate the taught visual qualities. (Self-assessment, critique of art and design)	Knowing how (knowing that)
3. Self-expression and free, flexible minds	Cultivation of personal expression protected against external standards of technique, form and the imitation of visual culture	Unique, spontaneous expressions uninfluenced by others	Knowing how
4. Informed and participating citizens	Decode values and ideas embedded in the visual culture and to learn how to read images of mass media, architecture, commercials and art in order to reveal whose interests are being served and make informed artefacts	Made artefacts along with criticisms based on knowledge about visual culture.	Knowing that Knowing how

Figure 2: Four different visions of art and crafts education and their correlated assessment evidence.

The first vision, advocating craftsmanship, is rooted back to the time when art and crafts was established as a compulsory school subject in 1889 and is articulated by sloyd educators such as Marie

[2] "Knowing how" refers to knowledge which are shown or demonstrated by the making of artefacts, visual assessment evidence. "Knowing that" refers to written or spoken forms of reporting, verbal assessment evidence Cunliffe (2005).

Rosing (1880), Hans K. Kjennerud (1895) and Otto Salomon (1884). The second vision, advocating aesthetic sensibility, had its prime in the 1950s and was promoted by Rolf Bull-Hansen (1950, 1952) and inspired by Herbert Read's thoughts on the activity of appreciation (1945, p. 205). The third vision, advocating creative self-expression, was highly influential in Scandinavian countries in the 1970s due to the Danish translation of the 5th version of Creative and Mental Growth (Lowenfeld & Brittain, 1971), but can easily be traced back to Herbert Read's descriptions of the activity of self-expression (Read, 1945, p. 206). The fourth vision, advocating citizenship, was the contemporary counter-reaction to *Creative and Mental Growth*, represented by *Bilden, skolan och samhället* (Nordström & Romilson, 1970, 1972) and a present adaptation linked to democratic participation in the shaping of visual culture and built environments developed by Liv Merete Nielsen (2000).

The present curriculum is a negotiated document, and its competence aims and described subject objectives combine multiple visions of art and crafts education. The subject's different kinds of assessment evidence (e.g., sketches, objects, criticism, craftsmanship) and their mutual power relations are not directed by the curriculum. Diachronic profiles could aid art and crafts teachers in their educational considerations on the bigger picture of pupils' capabilities in the subject. They could provide a toolbox with which teachers could discuss their regimes of competence, identify which visions of art and crafts education they echo in their own assessment practices and identify alternatives as a means to make informed choices regarding descriptors of quality to make newly meaningful alongside the directed development of the detailed criteria of goal achievement.

Guidelines on assessment evidence

The discussion of visual versus verbal assessment evidence from School A and B relates to vision 2 advocating aesthetic sensibility. My PhD fieldwork reveals how best-practice art and crafts teachers hesitate to make, for example, verbal assessment evidence influential, even with strong support from the curriculum. At School A they had chosen to set aside 1/3 of the learning objectives in the curricula, letting the visual assessment evidence document the use of concepts, theoretical knowledge. At School B they highlighted the importance of theoretical knowledge as a means to foster understanding of the conventions pupils used and adopted intuitively from the visual culture of their daily lives. But when it came to grading, the verbal assessment evidence had no weight on its own. Why then should their pupils bother to adopt a verbal repertoire of subject-related terms to discuss and evaluate made objects? Would a 15-year-old value possibilities of decoding, discussing and raising critical questions to contemporary and past visual culture as a co-creating actor in his or her community? Most likely not. Pupils also need to see the short-term gain and to be acknowledged for their efforts when teachers negotiate final grades in the subject Art and crafts. The Ministry of Education and Research shelved the idea of implementing national assessment criteria in all subjects. Aiming towards more subject-related and fair assessment practices, guidelines on assessment evidence may be a better option. That would enhance equal opportunities for pupils to develop their competence in each subject and facilitate a comparable and thus fairer basis on which to negotiate final grades.

References

Andersen, D. (2001). Something to sit on. *FORM*, *35*(2), 24–25.

Bakke, A. L. (1973). Forming som mentalhygiene. *Forming*, *23*(3–4), 44–46.

Brænne, K. (2009). *Mellom ord og handling: Om verdsetjing i kunst og handverksfaget*. Oslo: Arkitektur- og designhøgskolen i Oslo.

Brænne, K. (2011). Vedlikehald av ein konstruert kontrovers – kunstpedagogikk og handverkstradisjon i kunst- og handverksfaget. *FORMakademisk*, *4*(2), 95–108.

Bull-Hansen, R. (1950). Om tegning. *Forming*, *2*(1), 3–5.

Bull-Hansen, R. (1952). Om grunnlaget for sløydopplæinga i folkeskolen. 4. artikkel. Hvordan forholder 12–14 åringer seg til skapende virksomhet? *Forming*, *4*(3), 15–16.

Cunliffe, L. (2005). The problematic relationship between knowing how and knowing that in secondary art education. *Oxford Review of Education*, *31*(4), 547–556.

Dale, E. L., & Wærness, J. I. (2006). *Vurdering og læring i en elevaktiv skole*. Oslo: Universitetsforl.

Dormer, P. (1997). The language and practical philosohy of craft. In P. Dormer (Ed.), *The culture of craft: Status and future* (pp. 219–230). Manchester: Manchester University Press.

Eisner, E. W. (2002). *The arts and the creation of mind*. New Haven: Yale University Press.

Forsøksrådet for skoleverket. (1960). *Læreplan for forsøk med 9-årig skole (Vol. 5)*. Oslo: Forsøksrådet for skoleverket.

Freedman, K. (2003). *Teaching visual culture : curriculum, aesthetics, and the social life of art*. New York: Teachers College Press.

Furre, H., Danielsen, I.-J., Stiberg-Jamt, R., & Skaalvik, E. M. (2006). *Analyse av den nasjonale undersøkelsen "Elevundersøkelsen" 2006.* Retrieved 17 November 2006, from http://www.utdanningsdirektoratet.no/upload/Rapporter/elevinspektorene/Elevundersokelsen_2006.pdf

Goodlad, J. I. (1979). *Curriculum inquiry: The study of curriculum practice.* New York: McGraw-Hill.

Haabesland, A. Å., & Vavik, R. E. (2000). *Kunst og håndverk hva og hvorfor.* Bergen: Fagbokforl.

Illum, B., & Johansson, M. (2012). Transforming physical materials into artefacts - Learning in the school's practice of Sloyd. *Techne Journal*, *19*(1), 1–15.

Kimbell, R. (1997). *Assessing technology: International trends in curriculum and assessment*. UK, Germany, USA, Taiwan, Australia. Buckingham: Open University Press.

Kjennerud, H. K., & Løvdal, K. (1895). *Haandbog for sløidlærere: selvhjelp for sløidere.* Kristiania: Cammermeyer.

Klette, K. (2003). *Klasserommets praksisformer etter Reform 97.* Oslo: Pedagogisk forskningsinstitutt.

Kunnskapsdepartementet. (2006). *Læreplanverket for Kunnskapsløftet (Midlertidig utg. juni 2006 ed.).* Oslo: Utdanningsdirektoratet.

Kunnskapsdepartementet. (2010). *Forskrift til opplæringslova.* Retrieved from http://www.lovdata.no/cgi-wift/ldles?doc=/sf/sf/sf-20060623-0724.html

Lowenfeld, V., & Brittain, W. L. (1971). *Kreativitet og vækst: en redegørelse for den tegnepsykologiske udvikling hos børn og unge og nogle pædagogiske konsekvenser* (N. T. Kjelds, Trans. am. 5. ed.). København: Gjellerup.

Lundgren, U. P. (2006). Political governing and curriculum change - From active to reactive curriculum reforms. The need for a reorientation of curriculum theory. *Studies in Educational Policy and Educational Philosophy*, *5*(1), 1–12.

Lutnæs, E. 2011. *Final grades in the Subject Art and Crafts. The assessment repertoire of teachers (*CON-TEXT, Avhandling; 52). Oslo: Arkitektur- og designhøgskolen i Oslo.

Moe, E. (2010). Jump – manipulating an art-work. *FORM, 44*(3), 16–17.

Mortimore, P. (2005). *Equity in Education. Thematic Review.* Norway. Country Note: OECD.

Nielsen, L. M. (2000). *Drawing and spatial representations: Reflections on purposes for art education in the compulsory school.* Oslo: Oslo School of Architecture.

Nielsen, L. M. (2009). *Fagdidaktikk for kunst og håndverk: I går, i dag, i morgen.* Oslo: Universitetsforl.

Nordström, G. Z., & Romilson, C. (1970). *Bilden, skolan och samhället.* Stockholm: Bokförlaget Aldus/Bonniers.

Nordström, G. Z., & Romilson, C. (1972). *Skolen, bildet og samfunnet* (M. Paulsen & S. Sandnes, Trans.). Oslo: Pax.

Norwegian Directorate for Education and Training. (2008). *Equity in education for all – Understanding central concepts*. Retrieved from http://www.udir.no/Brosjyrer/_english/Equity-in-Education-for-all---understanding-central-concepts/

Norwegian Ministry of Education and Research. (2006). *Early intervention for lifelong learning. Summary of Report No. 16 (2006–2007) to the Storting*. Oslo: Norwegian Ministry of Education and Research.

Nyrnes, A. (2008). Ut frå det konkrete: innleiing til ein retorisk kunstfagdidaktikk. In A. Nyrnes & N. Lehmann (Eds.), *Ut frå det konkrete: bidrag til ein retorisk kunstfagdidaktikk* (pp. S. 9–26). Oslo: Universitetsforl.

Read, H. (1945). *Education through art.* London: Faber and Faber.

Reitan, J. B. (2007). *Improvisation in tradition. A study of contemporary vernacular clothing design practiced by Iñupiaq women of Kaktovik, North Alaska.* Oslo: Oslo School of Architecture and Design.

Rosing, M. (1880). *Haandarbeide som skolefag: Veiledning for lærerinder.* Kristiania: P. T. Malling.

Ryle, G. (1971). *Collected papers.* (Vol*. 2).* New York: Barnes and Noble.

Salomon, O. (1884). *Om slöjden såsom uppfostringsmedel.* Stockholm: Samson & Wallin.

Scheibler, S. F. (1982). JA til vurdering NEI til karakterer i forming. *Forming i skolen,* 4, 12–13.

Schönau, D. W. (1996). Nationwide assessment of studio work in the visual arts: Actual practice and research in the Netherlands. In D. Boughton, E. W. Eisner & J. Ligtvoet (Eds.), *Evaluating and assessing the visual arts in education: International perspectives* (pp. XIII, 330 s.). New York: Teachers College Press.

Strømnes, Å. L. (1963). Mål og evaluering: Ein analyse av målsynspunkt for formingsundervisninga og ei drøfting av sume evalueringsproblem. *Forming, 15*(3–4), 7–15.

Utdanningsdirektoratet. (2009). *Sluttrapport: Oppdragsbrev nr. 6 - 2007 om tiltak knyttet til individvurdering i skole og fag- og yrkesopplæring*. Oslo: Utdanningsdirektoratet.

Utdanningsdirektoratet. (2010a). *Rundskriv Udir-1-2010 – Individuell vurdering i grunnskolen og videregående opplæring etter forskrift til opplæringsloven kapittel 3*. Oslo: Utdanningsdirektoratet.

Utdanningsdirektoratet. (2010b). *Vurdering på ungdomstrinnet og i videregående opplæring. Nå gjelder det*. Oslo: Utdanningsdirektoratet.

Wenger, E. (1998). *Communities of practice: Learning, meaning, and identity*. Cambridge: Cambridge University Press.

Eva Lutnæs, Dr., is a Research Fellow at the Faculty of Technology, Art and Design, Oslo and Akershus University College of Applied Sciences. She completed her PhD program at Oslo School of Architecture and Design in 2007 and defended her thesis "Final Assessment in the Subject Arts and Crafts – Teachers' Repertoire of Negotiation in 2011". Lutnæs has lectured on art and design education at Bachelors and Masters level and she has run seminars for art and design educators on the topic of assessment in Norway and Sweden. Currently, her main research interests are focused on assessment of student work, design education for citizenship and design literacy.