

Competence Goals Towards Responsible Creativity

A Norwegian Curriculum Review Based on Four Narratives

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With the establishment of the new Norwegian curriculum for primary and lower secondary education, the definition of competence has changed considerably. This definition is key to both the development and interpretation of competence goals. The expectations of general education has increased with the inclusion of ‘the ability to reflect and think critically’ to the definition of competence, along with the need to reinvent our modes of living to care for the environment and address future global challenges. How does the new competence goals in the subject Art and Crafts cope with this conceptual change? In this paper, ‘the ability to reflect and think critically’ is manifested in four narratives: (a) ‘awareness through making’, (b) ‘empower for change and citizen participation’, (c) ‘address complexity of real-world problems’ and (d) ‘participate in design processes’. These narratives provide a lens through which one can identify and discuss the potential of critical reflection in the new competence goals in the Art and Crafts subject. Narratives (a) and (d) are clearly integrated in the goals, and they promote the practice of reflective processes as part of pupils’ making in the Art and Crafts studio; by contrast, the two other narratives, which could expand the process of skilled making to a more radical recreation of the world and all the unsustainable systems embedded in the process of making, are scarcely represented.

Keywords: Responsible creativity, curriculum review, critical reflection, general education, Art and Crafts

New national curriculum for the Norwegian subject *Art and Crafts*

In August 2020, a new national curriculum (LK20) for primary and lower secondary schools (year 1-10) in Norway replaced the 2006 curriculum (LK06). The national curriculum serves as a regulation and provides competence goals that stipulate what pupils should be able to master after completing a given year of study. The definition of competence is a key both to the development and interpretation of goals, and the definition in LK06 considerably differs from that in LK20. As defined in LK06, pupils demonstrate competence when they apply their knowledge and skills to solve problems in specific situations (Norwegian Directorate for Education and Training, 2016). In the new definition, ‘specific situations’ has been expanded into ‘familiar and unfamiliar context and situations’, and ‘the ability to reflect and think critically’ has been added. The new definition of competence was published as a component of the *Core Curriculum* (Norwegian Directorate for Education and Training, 2017), and it provided a mandatory point of reference for the development of the competence goals of the subject curriculum (June 2018–November 2019). I became a part of the *Art and Crafts* curriculum panel tasked to develop the core elements and subsequently the subject curriculum by the Norwegian Directorate for Education and Training. In this article, I turn back to the curriculum text I know from stem to stern to explore how the 41 competence goals of the subject *Art and Crafts* (year 1-10) support the conceptual change. To ensure transparency in the analysis, my first step is to unpack the details of ‘the ability to reflect and think critically’.

What does it mean to reflect and think critically?

Guidelines was determined by the Ministry of Education and Research (2018) to support the curriculum panels across subjects to understand the joint principles and the key concepts in the LK20. The section

on competence goals describes eight guidelines. The sixth guideline is relevant to this paper as it prompts the curriculum panels to highlight understanding, reflection and critical thinking in the competence goals. The sixth guideline specifies *reflection* as the ability of pupils to reflect on what they are doing, and *critical thinking* as their ability to make critical and ethical assessments. The distinction between them echoes the vital difference when reflection is linked or not to the prefix ‘critical’. *Reflection* operates towards improvements in an established field of practice—the how of actions—whereas *critical reflection*—the why of an action—addresses the reasons and consequences of what we do, and it aims to effect a profound change in our attitudes and actions (Mezirow, 1990).

In relation to the field of making, the first, *reflection*, asks pupils to disrupt the intuitive flow of actions and turn them reflective to improve their practice in the studio; for instance, they might need to add a joint to make a stool more stable. The second, *critical reflection*, asks pupils to step back and assess the reasons for making and the social and environmental impacts of making. In terms of critical reflection, pupils turn the foundations and imperatives of making into questions: What are the traditions and ideologies that guide making? Whom and what is affected by my making and by the making of designers, craftsmen and artists? What are the more ethical modes of production, trade and consumption? A praxis of critical reflection makes general education an arena to question, rethink and transform our current knowledge base and cultural practices and not passively reproduce them. Ideas of societal transformation and responsible citizenship through education are promoted through critical consciousness (Freire, 1970), critical art education (Illeris, 2012; Nordström, 1970), ecological literacy (Orr, 1992), education for sustainable development (UNESCO, 1997) and design education for a general public (Nielsen, 2013).

Both the abilities of reflection and critical reflection are favourable outcomes of general education. Reflection facilitates the vital adjustments during a process of making promoting pupils’ craftsmanship and their conscious use of visual elements. Critical reflection is far more radical as it promotes change in the ways by which people interact with the world by empowering them to navigate complexity and the ethical concerns of human living and creativity. The analysis in this paper aligns with the idea of critical reflection as it draws upon a literature review (Lutnæs, 2019) of key papers that explored how design literacy as a component of general education can support critical innovation and the possible transition towards sustainable societies. The review underscored that the selected papers had to promote ethical responsibilities and critical reflection. Three papers in recent scientific discourse met the criteria: Christensen, Hjorth, Iversen, & Smith (2018), Green (2014), and Nielsen and Brønne (2013). A repetitive process involving combining concepts to narratives, revisiting all three texts, moderating narratives and revisiting the texts has identified four shared narratives (Lutnæs, 2019), as shown in Figure 1.

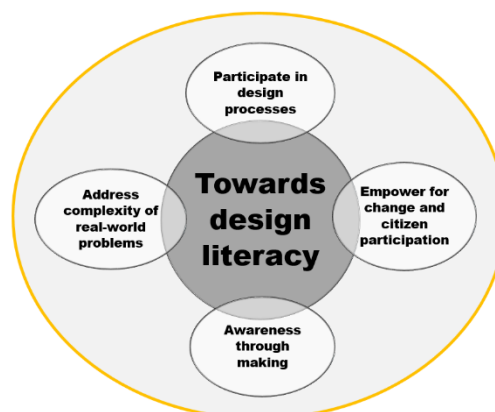


Figure 1. Four generative narratives across the key papers on design literacy for a general public.

The first narrative, (a) ‘Awareness through making’, draws upon the significance of placing materials in the hands of pupils, as reported by the authors. As makers, they transform materials to externalize and advance ideas, and in the process of making, they connect both to the physical reality and to the concepts of culture in order to articulate meaning. Awareness indicates understanding of the socio-environmental impact of human-made artefacts and of what it takes for products to be solid, functional and interesting to use over time. The second narrative, (b) ‘Empower for change and citizen participation’, is a shared narrative on the importance of providing pupils with a sense of agency and tools to question, rethink, and transform the world around them. Everyone has a significant role to play in the transition towards more sustainable ways of living or towards further destruction, and the authors promoted design literacy as a game changer in fostering a more responsible citizen participation. The third narrative, (c) ‘Address complexity of real-world problems’, is framed as a key feature of design literacy wherein pupils are challenged to map and navigate conflicting interests and dilemmas embedded in design practices and solutions. The fourth narrative, (d) ‘Participate in design processes’, is described by the authors as the narrative that enables pupils to adopt the designers’ tools for innovation and understand how designers think. Lutnæs (2019) provides a more rigorous analysis and presentation of these narratives and the employed methods in the literature review.

Design in the intersection of art and craft – empathy, criticism and transformation

This paper explores all the competence goals in the new national *Art and Crafts* curriculum (Ministry of Education and Research, 2019) for primary and lower secondary education (year 1-10) through the lens of the four narratives on how to cultivate design literacy. However, the question that arises is whether this approach is appropriate. How could narratives derived from papers on design education be of interest across fields related to the subject *Art and Crafts*? In the new curriculum, the competence goals related to the field of architecture stand side by side with the competence goals in traditional crafts, infographics and artistic expressions. Since 1960, the curriculum practice in Norway has differed from that in its Nordic neighbours, as the Bild and Sloyd traditions merged into one subject curriculum, ‘Forming’, which was named ‘Art and Crafts’ since 1997. For the narratives to be relevant, they must rely on an understanding of design as a practice of empathy, criticism and transformation and not as a practice of planning and developing products for sale. Looking back at the initial arguments on why design represents an important area of educational development, we can see some striking similarities of these arguments to the more recent scientific discourse. Design education for a general public was not introduced by Baynes (1974) as a means to shape consumer goods but to meet the ‘urgent need for the survival as well as the happiness of mankind’ (Baynes, 1974, p. 46). Cross (1982) promoted design as a basic way of knowing, along with humanities and sciences, to serve us in our daily lives and in our preparation for social roles. The four narratives allow us to address and explore the alternative modes of living, and by shifting the focus from product to ability, they might promote an approach involving responsible creativity (Craft, 2005; Lutnæs, 2017) across the field of art and design.

Review of the new competence goals in the Art and Crafts subject (year 1-10)

The subject *Art and Crafts* is compulsory across year 1-10 and is the fifth largest subject in primary and lower secondary education, accounting for 623 hours out of the total 7,894 hours. The majority of the time (477 hours) should be implemented at the level of primary education (year 1-7) (Norwegian Directorate for Education and Training, 2019). The subject curriculums in LK20 are divided into the following areas: relevance and values, core elements, interdisciplinary topics, basic skills, competence goals, and guidelines for assessment. This curriculum review is delimited to the text describing the competence goals (41 goals in total, year 1-10).

(a) Awareness through making

The first narrative draws a link between awareness and making. A design literate is skilled in making and knows how to transform materials to externalise ideas and products and how to articulate meaning by the use of visual elements. When awareness is integrated, the process of making becomes more

complicated. Awareness shifts the focus towards the effects of making on people and on the planet. In the new curriculum, a skilled maker is prioritized considering how all of the 41 goals necessitate a practical approach in order for pupils to acquire and demonstrate their competence. In this context, a practical approach involves moulding, ideation, building, drawing, testing, creating, visualizing, using tools, and examining possibilities in objects or materials. Of the 41 goals, 39 goals support the active maker in terms of transforming materials or in using visual elements. The two remaining goals belong to another category. In this category, the practical approach involves examining objects, pictures or materials as opposed to active making, and the pupils share their discovery by describing or through verbal assessment. In year 1-2, the goal encourages pupils to develop their skills in examining materials and in sharing their sensory experiences. In year 5-7, pupils examine materials in objects to consider their function, their durability and their possibility of being reused and repaired. In Table 1, the competence goals in LK20 and LK06 are compared based on two parameters, *active maker* and *examine/words*.

Table 1. Comparison of the competence goals in LK06 and LK20.

Curriculum	Active maker		Examine/words		Goals in total	
	LK20	LK06	LK20	LK06	LK20	LK06
Year 1-2	8	(11)	1	(2)	9	(13)
Year 3-4	10	(14)	0	(3)	10	(17)
Year 5-7	11	(15)	1	(5)	12	(20)
Year 8-10	10	(15)	0	(6)	10	(21)
Total	39	(55)	2	(16)	41	(71)
Percent	95.1%	(77.5%)	4.9%	(22.5%)	100%	(100%)

In the former curriculum, LK06 22.5% of the goals related to the category *examine/words*, in the new curriculum LK20, 4.95% of the goals. Verbal competence is consistently coined with active makers and has less intrinsic status in the subject in LK20 than in LK06. Verbal competence, however, is key in arousing pupils' awareness. A skilled maker is a key figure in the new curriculum, but how evident is the link in the new competence goals leading to the awareness on the socio-environmental impact of human-made objects, and what makes products solid, functional and interesting to use over time?

The majority of the goals (28 out of 41) do not explicitly promote pupils' awareness on the impact of making on nature or to humans. Rather, the focus is on visual elements, creative strategies or craft techniques themselves; for instance, 'plan and build using natural materials inspired by local traditions and by the Sami architecture' (competence goal, year 3-4, my translation). A minority of the goals (13 of 41) explicitly link the process of making to social or environmental impacts. The social impact of visual elements, particularly on how visual communication delimits and permits social roles, identity and critique, are tackled by the goals in years 5-7 and 8-10. In the goals in years 3-4 and 8-10, a link leading to the awareness on the social impact of design is established by interconnecting human needs to the properties of the physical environment. A goal in year 8-10 makes critical scrutiny a vital part of designing by integrating evaluation of longevity, functionality and aesthetical expression to the design process. The environmental impact of making on the use of materials, tools and techniques in a safe and environmentally conscious way is explicitly targeted in a goal that progresses through all the year levels (year 1-2, 3-4, 5-7 and 8-10). The progressing goal is listed first at every year level and urges both teachers and pupils to work systematically and knowledgeably in order to protect both humans and nature from damage.

(b) Empower for change and citizen participation

In the second narrative, the idea of empowerment is a key in promoting design literacy as a component of education for citizenship and democracy. The three key papers I reviewed, draw upon Freire's (1970)

educational ideas on how every individual play a significant role in questioning and recreating the world around them. In LK06, knowledge about form, colour and composition was promoted as an element that improves the opportunity of individuals to participate in democratic decision-making processes. In LK20, knowledge of techniques for visualisation, understanding and review of visual representations is a continuum in 29 out of the 41 goals. However, the goals that address the task of challenging or recreating the world can be counted with the fingers of just one hand. The pupils in year 1-2 are challenged to imagine and describe the future through drawings and models, and in year 8-10, pupils should be able to renew a local site. The critique of current practices is most pronounced in a goal in year 5-7 wherein pupils are challenged to explore alternatives to stereotypical visualisations of gender, as well as in year 8-10 wherein pupils explore how works of art have contributed to social criticism and have shed light on a contemporary societal challenge by art as a medium.

(c) Address complexity of real-world problems

The third narrative expects pupils to engage with the real world outside the studio. A design literate recognizes real-world problems as complex and is able to map and navigate conflicting interests and dilemmas in order to identify solutions that are not readily available. Competence goals that explicitly address real-world problems are hard to find in the new curriculum. In year 3-4, pupils should be able to explore possibilities in material re-use and communicate to others how they might contribute in safeguarding nature in their everyday living. Unsustainable practices of consumption and the growing amount of garbage are undoubtedly real-world problems of today; however, with the manner by which the competence goal is articulated, pupils may consult a list of pre-set solutions rather than doing their own mapping of conflicting interest and dilemmas. The mapping of complexity, however, might be executed through infographic in year 5-7. An infographic is a tool used to communicate complex data and to unfold relationships in a visual format. Infographic is listed as an optional media alongside photographs to describe a contemporary topic. As with the competence goal in year 3-4, the link that leads to conflicting interests and dilemmas is not evident. Their infographic could be a straightforward visualization of statistical data on loss of biodiversity. The only competence goal that combines the real world outside the studio and the idea of conflicting interest and dilemmas is integrated in year 8-10. Modelling architectural solutions to renew a local site, pupils should demonstrate their ability to reflect different needs and interests.

(d) Participate in design processes

The fourth narrative enables pupils to adopt the designers' tools for innovation: field study, problem framing, ideation, prototyping, evaluation to understand how designers think. The concept 'design process' is stated explicitly in two competence goals in years 3-4 and 8-10. Furthermore, four other competence goals include the concept 'process' without the prefix 'design'. Skills that belong to the designers' toolkit for innovation are apparent in a wide range of aims; for instance, "build on the work of others in your own creative works" (competence goal, year 1-2, my translation) and "use different strategies for ideation and problem solving" (competence goal, year 5-7, my translation). The verb "explore" is used in 7 of the 41 competence goals. Throughout year 1-10, sketching through drawing or models progresses as a skill, and verbs that promote the skill of evaluation, such as "interpret", "assess", "discuss", "use experiences", "analyse", "reflect", are used.

Critical reflection across narratives

The narratives **(a) awareness through making** and **(d) participate in design processes** are clearly integrated in the goals and they support the practice of reflective processes of a skilled maker in the studios of the *Art and Crafts* subject. By contrast, the narratives **(b) empower for change and citizen participation** and **(c) address complexity of real-world problems** are scarcely represented. These four narratives demonstrate the potential to enhance critical reflection, albeit at different levels. Narrative (a) prompts a maker to ensure minimum environmental damage and strive to produce a product that becomes solid, functional and interesting to use over time. Narrative (d) allows pupils to adopt tools for

ideation and evaluation. The two other narratives shift focus from product to the society outside the studios and allow for a more radical recreation of the world and all the unsustainable systems embedded in the process of making. In terms of promoting more sustainable modes of living, a skilled maker plays a vital role in repairing objects, in ideating and in making local products, as well as in rejecting short-lived consumer products. However, to address future global challenges, the subject should also facilitate projects that challenge pupils to fundamentally rethink human needs and desires. A more transformative practice, although scarcely represented, will rely on the development of learning resources that relate individual goals to the objectives of the entire *Art and Crafts subject curriculum* and the *Core curriculum*. The four narratives provide one tool to integrate critical reflection in the form of empathy, criticism and transformation into the *Art and Crafts* studio. Moreover, the four narratives can be united into Art and Crafts projects that would allow pupils to navigate ethical concerns of human living and creativity towards more sustainable modes of living.

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