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Education for sustainable clothing consumerism?

A critical examination of educational material for design and craft education

ABSTRACT
This paper sheds light on how aesthetic judgments govern actions in education for design literacy and sustainability behaviours. Educational material is examined by asking: (1) What meanings regarding becoming a sustainable consumer are made available to students in the educational material? (2) How are these narratives communicated to change students' behaviours? The material in question consists of 17 design projects intended to be used in the Swedish school subject, Educational Sloyd. Using a practical epistemological analysis, two ways of becoming a sustainable consumer are identified: to have fun and to feel clever. The paper also shows how social marketing is used as a strategy in communicating how to change student behaviours. In the discussion, we turn to design literacy research to discuss the results from an educational perspective.

Keywords:
Design literacy, educational material, craft, social marketing, sustainable consumerism.

INTRODUCTION

Clothes are something that we all need and wear. Clothing production and clothing consumerism have, however, become major environmental problems (Brooks et al, 2017; Fletcher 2016). Clean Clothes (2018), for example, reports that 100 billion garments are produced each year, and they claim that 60% become waste within the first year. According to European Environmental Agency (EEA) (2020), Europeans use nearly 26 kilos of textiles and discard about 11 kilos each year. Further, about 87% of the discarded clothing is, according to EEA, incinerated or landfilled. In this context, the discourses around clothing consumerism and textile waste are constituted as unsustainable and as something that needs to change. To resolve these unsustainable patterns, different actors in different sectors, such as governments, businesses, aid agencies, and non-governmental organisations (NGOs), are trying to raise awareness and change people's unsustainable behaviours and lifestyles to ones that are more sustainable. In this paper we will address these questions regarding the need to change people's behaviour in the context of education and design literacy.

In Environmental and Sustainability Education (ESE) research, the issues of behaviour change and sustainable development has been much debated. In 1992, in response to the *Our Common Future* report (UNESCO, 1987), Jickling (1992), in his article *Why I do not want my children to be educated for sustainable development,* argued that it is impossible to educate *for* sustainable development because there is no consensus about what sustainable development really means and what it aims for (p. 8). Instead, he emphasised that education needs to show and address the different sustainability stances, placing the uncertainties and the contradictions at the core of education. Scott and Gough (2003) also argue that the discourse of sustainable development does not present straightforward answers or solutions to global challenges. Rather, what counts as sustainable development, they argued, comes down to how we understand our environment, our place in it, and how we chose to act. Following this line of thought, pluralistic perspectives have been highlighted as a crucial element in education (Öhman, 2008), as has education as a way to help students to develop action competencies (Jensen & Snack, 1997; Van Poeck et al., 2023) and develop learner's agency (Stevenson et al., 2013). In recent years, there has been a growing body of literature emphasising the emotional aspects connected to unsustainability issues and EE. For example, research has highlighted that feelings of worry, anxiety, and "ecological grief" (Ojala et al. 2021) do not only severely affect young people's wellbeing (Romanello et al. 2021), they may also cause what Albrecht (2011) terms "eco-paralysis", which can hinder student's agency and their ability to take action. Further, Lindström, Jönsson, and Hillgren (2021) assert that in the context of environmental challenges, optimism is often a required emotional state for addressing the future. For example, they state that different technological fixes are assumed to sort out our futures while requiring minimal change in our daily lives. But, as they argue in their paper, the losses related to the transition to a post-carbon future also merit consideration and support for public anticipation that helps navigate and care for the tensions between hope and grief that exist when living in anticipation of uncertain futures. In sum, what this research shows is the importance of making the contradictions of sustainability visible and that pluralistic approaches need to be part of teaching and learning. Furthermore, research also acknowledges that emotions and feelings have significant influence on what sustainability actions are possible.

The paper aims to shed light on how aesthetic judgments are used to govern students' actions related to facilitating the development of sustainable behaviours. *Sustainable Fashion,* educational material produced by the NGO Swedish Consumers' Association (SCA) will be examined, guided by the following two questions:

1. What meanings regarding becoming a sustainable consumer are made available to students in the educational material?
2. How are these narratives communicated to change students' behaviours?

To answer the first question, a practical epistemological analysis (PEA) is made where aesthetic judgments are used to show how meaning making is constituted in the text. To answer the second research question, the analysis is deepened with the aid of social marketing and the concepts of *exchange*, *target group segmentation,* and *competition*. Based on our case study, we will discuss design literacy in education by highlighting educational tensions, specifically how aesthetic judgment govern certain actions in education on design literacy and clothing consumerism.

In the following section, the paper is situated in the context of education and design literacy. Then the empirical data for the case study is presented; namely, the educational material named *Sustainable Fashion*. After these sections, the theoretical stances of aesthetic judgments and the concept of social marketing are presented, as is a description of PEA, the method used in the analysis. The results of the case study are then presented, which addresses the research questions. In the last section of the paper, education for design literacy and clothing consumerism is discussed.

DESIGN LITERACY WHEN DEALING WITH SUSTAINABILITY ISSUES IN EDUCATION

Perhaps one of the most significant questions about any practice involving teaching and learning is: What is its purpose? This could have negative connotations, as in 'what is the point of learning design literacy?' but the question also demands a basic justification of an educational activity. The purpose of teaching design literacy differs, of course, depending on what one thinks design and design education aims *for* when addressing sustainability. Below we will situate our paper in the context of education and design literacy, specifically when dealing with sustainability.

The original meaning of 'literacy' is the ability to read, but the word has broadened in meaning over the last few decades. Gee (2015) introduced the concept of "new literacy studies" which refers to a comprehensive understanding of literacy that encompasses its various dimensions, including cognitive, social, interactional, cultural, political, institutional, economic, moral, and historical contexts. Design literacy is a part of these "new literacy studies" and learning to 'read' through design and the co-created process that follows from this making process is a well-known phenomenon in design research and literature. For example, based on design research, Lutnæs (2021) identifies four shared narratives for design literacy: (1) awareness through making, (2) empowerment for change and citizen participation, (3) addressing complexity of real-world problems, and (4) participating in design processes. Furthermore, we know from research that in the process of designing and crafting, as in making clothes for instance, different capabilities and skills are learned, such as problem-solving (Marchand, 2016), problem-finding (Sennett, 2008), material knowledge for longer-lasting products (Nielsen & Brænne, 2013), or skills for materialising ideas (Christensen et al., 2019). We also know that this process of making is a dialogue (Illum, 2006; Johansson & Illum 2009) and that it not only changes materials into products but also changes the maker. For instance, Fry (2012; Fry & Nocek, 2021) argues that all making is a remaking of who we are. Along the same line, Rosenberg (2013) argues that, through making, we constitute the way we are in the world. These ideas are provocative but resonate with the notion that when we design and make products, we do not simply produce and make things but rather, in the process of making, *we* are also changed.

One way to address design literacy as a sustainability issue is to look at the core of design knowledge, which is what Cross (1982) did when he promoted design as a basic way of knowing, in what he calls a *designerly ways of knowing*. In his argumentation, Cross draws on Rittel and Webber's (1973) definition of problem as 'wicked', of which he describes as ill-defined problems, and that a designerly way of knowing is well suited to tackle these problems. There can never be, as Cross writes, "a guarantee the 'correct' solutions can be found for them" (p. 7) and therefore, Cross argues for centring a solution-focus, rather than a problem-focus approach at the core of design. A key factor in Cross' argumentation is to understand that the *framing* of the wicked problem is made to find solutions. Other design researchers have followed this line of reasoning, arguing for framing as a key factor to, for example, navigate complexity in the systemic context in which the wicked problems occur (Body & Terrey, 2019), to develop agency among design students (Lehtonen; Yeow & Chew, 2022) and to address design, not as a vision of a brave new world, but as a "redirected practice" which can be achieved by adding to and mobilising

design intelligence (Fry, 2009). For example, a redirected practice, as Fletcher (2016) argues, is to consider clothes as a craft of use and to "acknowledges the deep-rooted political and structural influence of the market and individualistic consumption on our ideas about fashion" (p. 20) and broaden the agenda for fashion beyond the production and consumption of new clothes.

Another way to address wicked problems in education is to use the uncertainties in the educational activity. This is what Kronlid (2021) argues for when he is drawing on Donahue and Ochoa Espejo's (2016) styles of dealing with problems. The first style draws on analytical reasoning that employs two tactics: (1) *solving* intellectual problems; or (2) *dissolving* intellectual problems. The other tactics draw on continental philosophers and have other ways of approaching problems; namely, to (3) *press* the problem or to (4) *resolve* the problem. The four ways of tackling 'wicked' problems have four different purposes and thus the outcome of the teaching differs from explaining the problem with new information (solving), finding new ways of dealing with the problem (dissolving), digging deeper into the problem and seeing how it is unsolvable (pressing) and reconciling the problem and learning to live with it (resolving). What the different perspectives also enable is how to cope, emotionally, with the 'wicked' reality that many problems have. When design literacy is about learning to resolve a problem, it may help to address these worries or other emotions (cf. Ojala et al. 2021; Romanello et al. 2021). But this does not mean that optimism is the only required emotional state, as Lindström, Jönsson and Hillgren (2021) address in their research. In their finding from design workshops, spaces for both hope and grief were made when confronting shared difficulties and vulnerabilities.

To summarise, Education for Design Literacy is a multipurpose activity and can address different purposes, such as creating awareness through making, inspiring empowerment for change and citizen participation, addressing the complexity of real-world problems, and participating in design processes. When designing and crafting, multiple skills are acquired, and the process of designing and making is a dialogue through which both the designed and the designer are changed. Design literacy research also shows that design literacy has a lot to offer when dealing with 'wicked' problems, as design literacy has a solution-focus, rather than a problem-focus approach. This does not mean that teaching design literacy gives straightforward answers. On the contrary, teaching design literacy embraces the wickedness or 'ill-defined' problems of environmental and sustainability literacy. Understanding this framing is a key feature, according to design research. One way of doing this is to address design as a redirected practice by adding to and mobilising design intelligence. Another way of understanding the framing is to acknowledge four different styles—solving, dissolving, pressing and resolving—when dealing with the wicked problem in education. They may also help to address the emotional aspects of sustainability issues. Based on such research, design literacy may increase our understanding of how to deal with environmental and sustainability issues in education.

THE EDUCATIONAL MATERIAL: "SUSTAINABLE FASHION"
As noted in the introduction, there are many actors that want to create change and produce educational material for teachers to use in their work. One such example in Sweden is *The Swedish Consumers' Association,* which is a national consumer organisation in Sweden. They represent, as they write on their web page, Swedish consumer interests on national, regional and international levels, and are active members of the European consumer organisation, BEUC, Consumers International, and ANEC—the European Consumer Voice in Standardisation. Furthermore, they write that they use lobbying and influencing to increase consumers' power and their protection in society.

In 2017, the SCA published an educational series of educational materials, one of which was entitled *Sustainable Fashion,* and was directed at the design and craft subject *Educational Sloyd* which is a mandatory school subject in Sweden for grades 3 – 9. The educational material is divided into 5 themes: (i) Consumer's power, (ii) Fair clothes, (iii) Critical norms, (iv) Materials and facts, (v) Create and mend. Each theme has several design projects, and each design project has a purpose, a design activity, questions for discussion, questions for individual assessment, facts on the topic of the project, further readings, and curriculum assessment. The design project is therefore related to the grading system (A –

E) of Educational Sloyd. Altogether, there are 17 design projects. For further information, please visit the web page (SCA, 2017a).

As stated above, the aim of this paper is to shed light on aesthetic judgment as a way to govern actions in education on design literacy and sustainability behaviours. As a case study, we will analyse the 17 design projects presented in the education material *Sustainable Fashion*. To analyse 1) what meanings regarding becoming a sustainable consumer are made in the material, and 2) how these narratives are communicated to change behaviours, we will use aesthetic judgement and social marketing as two theoretical concepts, to which we will now turn our attention.

THEORETICAL FRAMEWORK AND METHODOLOGY
In this section of the paper the theoretical framework for the analysis is described. We will give a description of aesthetic judgment, social marketing, and the analytical approach.

Aesthetic judgments in meaning making processes
The SCA is clear in their message—they want to teach pupils about sustainable fashion—and their communication tool is written text. In our analysis of the educational material produced by the SCA, teaching is seen as part of a meaningmaking process where the elements of analysis are actions situated in communication and in whole activities (Garrison, 2022). Drawing from this, writing is seen as action because when someone—in this case the SCA—writes something, they do something that has both a purpose (teaching pupils about sustainable fashion) and a consequence (communicating what sustainable clothing consumer looks like). However, to understand this particular writing, we also have to get a grip on the situation in which transactions occur. Any description of a communicated message needs to include which kinds of elements are encountered in the message before we can describe the transactions that occur (Maivorsdotter & Wickman, 2011). Rosenblatt (2005) has emphasised texts as an encounter and a transaction between the author (the SCA) and the reader (the teachers and the pupils), through the processing of the text via the way in which it is written and how it is read. Rosenblatt (2005) stresses that when an author writes a text, an encounter occurs between the *author's intentions* and the *text* that is produced and, "at the same time, a virtual encounter occurs between the author and the *imagined reader* of the text" (Maivorsdotter & Wickman, 2011, p. 618). In social marketing, the image of the imagined reader is drawn from the principle of target group segmentation, where the imagined reader has a specific lifestyle, personality, and perceptions. Here the SCA could be said to be teaching (as informally understood) teachers and pupils about certain aspects of sustainable fashion; namely, how to be a sustainable clothing consumer. The SCA writes about relationships that are new to the reader and about which they want the reader to learn; i.e., not in the sense of memorising them, but in the sense of understanding and translating them in relation to the purpose of the text, which is to transform behaviour into more sustainable actions.

To emphasise their message, the SCA uses aesthetic judgments in their text, pointing out specific directions for learning about sustainable fashion (Maivorsdotter & Wickman, 2011). Previous research shows how authors use aesthetic judgments in their texts to highlight whether actions are moving towards fulfilment of specific end-in-views (using positive aesthetic judgments) or away from fulfilment of those views (using negative aesthetic judgments) (c.f. Andersson & Maivorsdotter, 2017; Hofverberg & Maivorsdotter, 2018; Maivorsdotter & Wickman, 2011). Drawing from the work of Dewey (1934/2005, p. 38) end-in-views are 'ends' that fulfil the aesthetic qualities of an experience, action, or event. Maivorsdotter & Wickman (2011, p. 2011) highlight how Dewey (1934/2005) does not delineate any significant difference between aesthetic experience and any other kind of experience. Rather, Dewey emphasises that every experience has aesthetic qualities which are perceived as moving towards or away from consummation and fulfilment; that is, whether divergent parts tend to become one whole or not. In their text—as we will show in the findings of this article—the SCA uses several aesthetic judgments which communicate to the reader which actions are leading towards or away from the fulfilment of being a sustainable clothing consumer.

Changing behaviours through socialmMarketing

In its broadest sense, the framing of social marketing is about applying marketing principles using techniques that have been proven to work when it comes to marketing commercial products and services. According to Cross et al. (2017) these are the principles of *exchange*, *target group segmentation,* and *competition*. The first key principle, *exchange,* is the idea that in order to get something, you have to give something up. So, there is some form of cost involved. This principle is based on the idea of 'self-interest'—the assumption that people will change their behaviour if the change is to their advantage. Social marketing for health would emphasise social benefits such as better health and well-being (Green et al., 2019). The second principal *target group segmentation* is based on the fact that populations can be segmented or divided into smaller units based on various factors such as lifestyle, personality, and perceptions. Accordingly, it is important to understand your target group, so that the needs that exist or that are created meet the right target group. There is, therefore, no 'one size fits all'; different target groups have different values, ambitions, and behaviours and want different things. *Competition* is the third and final principle in the social marketing strategy. In social marketing, competition almost always takes the form of existing behaviour and the benefits of that behaviour (Kotler et al., 2002). This is difficult, as we often compete with behaviour that the target group likes, like having a smoke, or having unprotected sex with strangers, or ordering a lot of clothes at home with a few simple button presses. Thus, one can say that the framing of social marketing is used to change behaviour and has been defined as "the application of marketing techniques for the analysis, planning, execution, and evaluation of programs designed to influence the target group's behaviour to improve their well-being in society" (Cross et al., 2017, p. 5). Like commercial marketing, behaviour change is often the goal of social marketing. In our analysis of the educational material produced by the SCA, teaching is seen as part of a meaningmaking process, where the elements of analysis are actions situated in communication and in whole activities (Garrison, 2022).

Analytical approach

Practical epistemology analysis (PEA) has been developed for the purpose of analysing the process of meaning making (Wickman, 2006; Wickman & Östman, 2002). Based on a theoretical mechanism that sees the meaning-making process as discourse change, PEA has developed a certain heuristic that can be used to analyse this process. Specifically, PEA involves what elements of experience people use and what this means for deciding how to proceed with an activity (Jakobson & Wickman, 2008). PEA is designed to analyse the direction that meaning making takes as a result of situated transactions that occur in educational situations. PEA has previously been used to track the meaning making, teaching, and learning processes in science education, physical education, and educational sloyd (e.g., Hofverberg & Maivorsdotter, 2018; Jakobson & Wickman, 2008; Wickman & Östman, 2002).

Four PEA concepts are used as an analytical framework in this study: (i) end-in-view, (ii) gap, (iii) relation, and (iv) encounter. The analysis is conducted as follows, using the four concepts: In *the first step* (i), the ends-in-view in the educational material *Sustainable Fashion*, are identified (Dewey [1934] 2005). For example, the end-in-view to "feel clever as a sustainable consumerist" has been identified in the educational material developed by the SCA. This end-in-view opens up a gap between fulfilment or unfulfilment of 'feeling clever' as a sustainable consumerist. End-in-views are fluid and unfixed meanings, which means that they can appear in some parts in the event—in this case in project descriptions on a website—disappear, and then appear in another event further on in the process.

The second step (ii) in the analysis is to identify gaps in the educational material. In order to fill this analytical gap, *the third step* (iii) of the study is to identify the various relations that are used in the text. A relation, here, refers to the statements or utterances that construe a connection between experience and concerns what the case is or how certain things are valued. The analysis only includes relations where aesthetic judgements are used that show the direction meaning making is taking. Relations such as "it is clever to only buy clothes that you actually need" show that being aware of one's personal preferences for clothes is an aesthetic experience. This relation is leading towards the fulfilment of feeling clever as a sustainable consumerist. This can be understood as having a positive aesthetic experience as a consumer. In contrast, relations like "buying clothes on impulse" leads away from ful-

filling the end-in-view of feeling clever as a consumer. This last relation is an example of a negative aesthetic experience. Earlier studies (Hofverberg & Maivorsdotter, 2018; Maivorsdotter & Wickman, 2011; Jakobson & Wickman 2008; Wickman 2006) have shown that people—in this case, the SCA who produced the text—make aesthetic judgements when making meaning of an experience that moves towards fulfilment (a positive aesthetic experience) or away from fulfilment (a negative aesthetic experience). For example, if the NGO makes the aesthetic judgement 'this will be perfect', they experience the action as moving towards the fulfilment of the ends-in-view. Aesthetic judgements therefore provide the researcher with information about how the SCA judges the possibility to successfully become a sustainable consumer of fashion.

In *the fourth step* (iv), the encounters that are analytically constructed within the relations are described; for example, the relation of "it is clever to only buy clothes that you actually need" asks what encounters emerge in this relation. This can be both physical things, for example, garments, and also the mental aspects that might appear, such as someone's previous experience of knowing what a 'needed' garment actually entails. In addition to these four steps, *a final step* (v) was included in the analysis, where the selected passages that include aesthetic judgements were interpreted through the lens of social marketing as exchange, target group segmentation, or competition.

The material *Sustainable Fashion* was analysed by the first and third author, first separately and then together, where all the five steps were considered. The identified ends-in-view were then categorised. For an example of the analysis, see Table 1. Reflections highlighted during these workshops were taken into consideration before writing up the findings. The two identified ends-in-view are presented below.

TABLE 1. The PEA process (end-in-view, gap, relation, encounter) from sample to social marketing

SAMPLE	END-IN-VIEW (i)	GAP (ii)	RELATION (iii)	ENCOUNTERS (iv)	SOCIAL MARKETING (v)
Discuss why we should buy *good quality* clothes. What do we gain from that? Can we be sure that a *good quality* garment is also *good* for the environment and for those who have worked in the manufacture of the garment?	To feel clever.	If you feel clever or do not feel clever.	To buy clothes where the workers had good working conditions.	Garment quality. Shopping habits. Environmental issues. Climate change. Working conditions in urban countries. Global health.	Exchange.
In the activity, the pupils will work out what their *dream jumper* is and how it will look. They will visualise the jumper by drawing, cutting, and pasting. Write on the board that they can think about colour, pattern, material/fabric, and possibly the brand.	To have fun.	If you have fun or do not have fun.	Create a dream jumper.	Personal taste in clothing. Designing and making clothes.	Target group segmentation.
Why do we buy so much? Ask the pupils *how they feel* when they buy something new. *We often feel happy when we shop*. Why do we feel this way?	To have fun.	If you have fun or do not have fun.	Create a feeling of happiness without shopping.	Shopping habits. Emotional aspects of shopping.	Competition.

FINDINGS

Drawing from the end-in-view step, two ways of making meaning in the sustainable consumption of fashion have been identified in the educational material "Sustainable Fashion", namely; *to have fun* and *to feel clever*. One can find examples of both in the introductory text on the organisation's website:

> Our idea with the educational material *Sustainable Fashion* is to start a discussion about textiles, clothing, and sustainability in an engaging and creative way. We want to encourage and inspire young people to more fun, more clever, more sustainable clothing consumption, and we believe that it is through your teacher that we have the greatest opportunity to deliver our message. (SCA, 2017a)

What meaning making is expressed is developed further in the 17 projects, and they lead towards the ends-in-view of 'to have fun' and 'to feel clever'. Both ways of meaning making will be outlined below using PEA with focus on aesthetic judgments as they are interpreted in terms of social marketing. The quotations below are chosen based on their representativeness and the aesthetic judgments in the quotations are written in italics by the authors. As mentioned in the method section, end-in-views are fluid and can appear side by side; however, we have decided to insert quotations in which both identified

end-in-views appear to give an authentic presentation of the educational material, but we only analyse one kind of end-in-view at a time.

To have fun
The first category that could be identified as an end-in-view in the material is *to have fun*. The six relations are all directed towards the activity of having fun.

TABLE 2. Table 2 shows the findings from the end-in-view "having fun".

TO HAVE FUN	RELATIONS
	create a dream jumper
	create a feeling of happiness without shopping
	make a clothes mob (where one garment is used by different people)
	to find your own style
	to feel for a garment
	to comment on politics through craft

The first example points to the activity, under the theme "Critical consumer", in which the students are asked to visualize a dream jumper (SCA, 2017b, p.3), and is considered a fun activity:

(1) In the activity, the pupils will work out what their *dream jumper* is and how it will look.

(2) They will visualise the jumper by drawing, cutting and pasting.

(3) Write on the board that they can think about colour, pattern, material/fabric,

(4) and possibly the brand.

The educational material also provides several questions and bullet points that the teacher should address as starting points for a discussion:

(5) What do we think about when we buy clothes? If we are going to go out and

(6) buy our *dream jumper*, how do we make sure *the dream* doesn't come crashing

(7) down? Ordinary shoppers are usually not able to really test clothes before

(8) buying, so *it's good to follow some guidelines*. Before we buy an item, it is

(9) useful to think about the following things in order to find clothes that will last:

(10) • *How do I make the right choice*?

(11) • Stitching

(12) • Material

(13) • What are the washing instructions?

(14) • Can it be mended?

(15) Write these points on the board and go through them, letting the pupils make

(16) suggestions about each point.

(17) How do I make *the right choice*? How can one know if one will actually wear

(18) the item of clothing? To begin with, it is important to always try on an item

(19) of clothing before buying it, as it is often the case that *it just feels right*. Does

(20) *the item look good* and *feel comfortable on the body*? Think about what you

(21) need and what it will be used for. The item will need to have certain

(22) characteristics if you are going to exercise, like in the clip, or if you are going

(23) to wear it to school or to a party. Next to the picture of their *dream jumper*,

(24) have the pupils to write the context *they can imagine wearing it* in (SCA, 2017b, p.3)

The *end-in-view* in this project is that pupils should have fun with clothes when behaving as sustainable consumers. This end-in-view opens up a *gap* in the meaning making—if pupils have fun or not while being sustainable clothing consumers. This gap is filled by a number of relations in the educational material where the *relation* to create a dream jumper appears in the quotation above. The SCA uses several aesthetic judgments when making this relation, showing what is valued when becoming a sustainable clothing consumer. The aesthetic judgments show if the meaning of clothing and consumption is moving towards fulfilment of the end-in-view (having a positive aesthetic experience) or if the meaning is moving away from fulfilment of the end-in-view (having a negative aesthetic experience).

      The relation to create a dream jumper is built on the following: in the first line, the SCA uses the aesthetic judgment *dream jumper* [1], showing that personal dreams can lead to the fulfilment of having fun with clothes and still being a sustainable consumer. This positive aesthetic judgment is also repeated in line six. This way of meaning making can be understood in terms of social marketing trying to change behaviour directed toward a specific target group; in this case pupils' interest in clothes and their ability to relate to clothes in terms of "dreams". However, the same line contains the negative aesthetic judgment *the dream doesn't come crashing down* [6, 7], pointing at how buying clothes without thinking is something that leads away from the end-in-view. This utterance is followed by the aesthetic judgment that *it's good to follow some guidelines* [8], highlighting guidelines as helpful to fulfil the end-in-view of having fun as sustainable clothing consumer. In this part of the educational material, the SCA uses an exchange as part of their social marketing. In order to be a sustainable clothing consumer and still enjoy buying clothes, the pupils have to give up their habit of buying without thinking and use some guidelines

to help them shop with more thought. Connected to this meaning is the aesthetic judgments *how do I make the right choice?* [10, 17] Even this aesthetic judgment is part of social marketing, in terms of exchange. Following the guidelines will help pupils to make the right choice. In order to become sustainable clothing consumers, pupils must change their behaviour (stop buying on impulse); but in exchange, they now can have the feeling of making the right choice. However, to fulfil the end-in-view of having fun, simply valuing stitching and material, and reading washing instructions are not enough. By using the aesthetic judgment *it just feels right* [19] *the item looks good* [20], and [it] *feel[s] comfortable on the body* (20), the SCA shows that the right choice is not only about facts but also involves feelings. This is classical social marketing. The SCA try to complete their message of changing consumer behaviour with lacing the 'medicine' (stitching, material, washing instruction) with a 'spoonful of sugar' (feels right, looks good, feels comfortable). The SCA summarises this taste for sustainable clothing consumption by ending the project description with the aesthetic judgments *dream jumper* [23] and that the pupils finally *can imagine wearing it* [24].

Another example that points to the end-in-view 'to have fun' is to create a feeling of happiness without shopping. The activity in this project is for the pupils to design one garment that they will use for one year. The idea is that this garment is the only garment that they use for the whole year. In the follow-up-discussion, certain questions are addressed, and one of them is how one can create a feeling of happiness without shopping:

(25) Begin the discussion by asking the pupils how long they think an ordinary

(26) item of clothing usually lasts.

(27) • Think about what would happen if the clothes we buy lasted 200 years?

(28) • Ask if the pupils are aware of how many textiles are bought in Sweden on

(29) average every year. (Every year in Sweden we buy 12.5 kilos of clothing and

(30) home textiles per person).

(31) • And how much do we throw out? (Every year in Sweden we throw out

(32) approximately 8 kilos of clothes and home textiles per person).

(33) • Why do we buy so much? Ask the pupils how they feel when they buy

(34) something new. We often feel happy when we shop. Why do we feel this way?

(35) • If you were not allowed to buy any new clothes for a whole year, how

(36) would you manage with the clothes you have now?

(37) • How can we create the feeling of happiness without buying anything new?

(38) • How can we freshen up our clothes or get clothes without shopping? List

(39) ideas on the board. Redesigning or borrowing are good examples (SCA, 2017c, p.11)

The end-in-view of having fun opens up a gap which the SCA fills with relations; making meaning of 'fun' in terms of creating feelings of happiness without shopping. In line 34, the aesthetic judgment *We often feel happy when we shop* appears in the project description. This is an aesthetic judgment directed toward a specific target group; namely pupils who enjoy buying clothes. Further on, the SCA uses the aesthetic judgment *feeling of happiness* [37] in the question of how to have fun with clothes without buying anything new? This question and the following—how to get clothes without shopping—can be understood as social marketing. By writing about the competition between the existing behaviour of shopping and the preferable behaviour of not shopping, the SCA creates an unequal alliance between themselves and their target group. 'We' know that buying clothes creates a feeling of happiness. Shopping is 'our' existing behaviour, and it gives 'us' the benefit of having fun. However, in order to be a sustainable clothing consumer, 'we' have to give up shopping and instead create fun with clothes by redesigning or borrowing. SCA ends the project description with the aesthetic judgment *good examples* [39], clarifying that redesigning and borrowing are positive aesthetic experiences leading to having fun as a sustainable clothing consumer.

To feel clever
The other category that that has been identified as an end-in-view is *to feel clever*. This category is larger, as we have identified 18 ways of feeling clever. We will present one example by using PEA and then list the other ways.

Other relations that emerge in this category with the end-in-view 'to feel clever' can be divided into three different themes. The first theme is to have knowledge about clothes as consumption items, the second theme is to have knowledge about clothing fabric, and the third theme is to have consumer's knowledge and be able to take actions based on said knowledge. In the table below all the relations we identified are stated outright.

TABLE 3. Table 3 shows the findings from the end-in-view 'feeling clever'.

TO FEEL CLEVER	RELATIONS
Knowledge about clothes as consumptions items	not buy clothes based on impulse to have clothes that you actually need to think about what clothes you need to not to shop so much to not to buy wear-and-tear
Knowledge about clothes' fabric	to know that the garment will not break to have knowledge of the quality of the material to know how clothes are handled and mended to wash woolen garments by hand to have clothes that feel good on the body to not wash too often
Consumer's knowledge and actions	to save the receipt when buying to reward nice companies to send letters to responsible businesses and politicians to wear the same garment in pursuit of sustainable fashion to buy clothes where the workers had good working conditions to write a debate article to find out more about labels so that the environment, workers, or consumers are not harmed

In the first example, the following passage in the "Sustainable Fashion" text points to feeling clever when one buys clothes that last, even though they may be more expensive. In the project called "Quality vs. Quantity" half of the class is asked to design a bag based on quality (i.e., making it so it will last) and half the class is asked to design a bag based on quantity (i.e., making as many as possible). After the activity, the class is meant to discuss the results of the activity:

(40) Discuss the results of the different groups.

(41) How did they think about and what choices did they make when they were

(42) to create quality? How did those who were to create quantity decide what

(43) choices to make? Discuss why we should buy *good-quality clothes*. What do

(44) we gain from that? Can we be sure that a *good-quality garment* is also *good*

(45) *for the environment* and *for those who have worked in the manufacture of*

(46) *the garment?*

(47) Often, *better quality* costs a little more. Illustrate the relationship between

(48) price and quality through this calculation, which shows how much a garment

(49) costs per use.
　　　Winter jacket: 1000 SEK/100 days of use each year for 2 years = 5 SEK per use
　　　Party top: 50 SEK/2 times = 25 SEK per use. (SCA, 2017b, p. 7)

The end-in-view—to feel clever—opens up a gap in the meaning making of sustainable clothing consumption in terms of feeling clever or not feeling clever as a consumer. The SCA fills this gap with a number of relations containing aesthetic judgments pointing at which actions lead to fulfilment of being a clever consumer and which actions lead away from it. In lines 43–44 the SCA asks a question including the aesthetic judgment *good-quality clothes*. Why should 'we' (the consumers) buy such clothes? The question is rhetorical, and in the following lines the SCA clarifies that consumers want to be sure that a *good-quality garment* [44] is *good for the environment* [44–45] and *for those who have worked in the manufacture of the garment* [45–46]. Therefore, buying good-quality garments is an aesthetic experience leading towards fulfilment of being a sustainable clothing consumer, an experience that makes you feel clever as a consumer. However, in the following line, the SCA states that *better quality* [47] costs a little more, and they illustrate the relationship between price and quality with paying 1000 SEK for a winter jacket and wear it 25 times, instead of paying 50 SEK for a party top and only using the top twice. Not all pupils can afford to pay 1000 SEK for an item, but the target group that the message seems to be directed toward are pupils that can afford that sum of money. The behaviour change promoted by the SCA is competing with the target group's habit of buying a lot of clothes. The exchange that the SCA suggests is that the pupils should avoid buying fast fashion and instead invest in fewer items of better quality that will last longer, in order to feel clever as consumers.

　　　The second example that points to the end-in-view to 'feel clever' is not to buy clothes based on impulse. In the following, clothing is described as based on what one needs, and this passage is found in the section of "Sustainable fashion" called "Facts about clothing":

(50) The basic function of clothes is to protect us and keep us warm. However,

(51) clothes also have the function of reflecting who and what we are, and also to

(52) put us *in certain moods*. These needs can be ranked according to Maslow's

(53) hierarchy of needs. According to this, the needs of people are arranged

(54) according to five levels:

　　　1) Physical needs

　　　2) Security needs

   3) The need for companionship and affection

   4) The need to feel appreciated

   5) The need to achieve self-realisation

   (55) Clothes can be used to fulfil the needs of all the levels. However,

   (56) *emotional needs are complex and inexhaustible*. When we try to meet these

   (57) needs through our clothes, it often leads to an increase in the amount of

   (58) clothes we buy. (SCA, 2017c, p.8)

As in the earlier analysis, this end-in-view opens up a gap in the meaning making in terms of feeling clever or not feeling clever as a consumer. This part includes two relations where aesthetic judgments are used by the SCA (see italics in the quotation above), to fill the gap and to promote changed consumer behaviour. Beyond the basic function of clothes, clothes also have aesthetic qualities in terms of creating *certain moods* [52]. According to the SCA, wanting to be in those moods are aesthetic experiences that are understandable but not desirable. Instead of following our aesthetical preferences, we—as consumers—should be aware that *emotional needs are complex and inexhaustible* [56]. Something that could be captured as a positive aesthetic experience, leading to fulfilment, is instead the opposite—a negative aesthetic experience leading away from being a clever consumer. That is why emotional needs are complex, according to the SCA, they are needs that in the short turn will lead to satisfaction for the individual but in the long turn leads to harm for the collective. The exchange, that the SCA promotes in this project description, is that consumers should give up buying a lot of clothes on impulse and instead cultivate their aesthetic experiences of clothing into more sustainable manners. This is how to feel like a clever consumer.

DISCUSSION AND THE CALL FOR DESIGN LITERACY IN EDUCATION

The aim of this paper was to shed light on how aesthetic judgments govern actions in education on design literacy and sustainability behaviours. The educational material *Sustainable Fashion,* produced by the Swedish Consumers' Association, was examined in relation to two questions. To answer the first question—What meanings regarding becoming a sustainable consumer are made available to students in the educational material? — PEA and a focus on aesthetics judgment were used. Two ways of sustainable clothing consumption are identified: 'to have fun' and 'to feel clever'. In the educational material there are certain ways that are promoted as either having fun (see Table 2) or feeling clever (see Table 3). Thus, there are certain actions that are promoted to solve environmental and sustainability problems, where some actions included in becoming a sustainable clothing consumer and other actions are excluded. For example, a student is included if s/he identifies with "making a dream sweater" as a fun activity or if s/he can identify with the clever choice of buying a more expensive garment. A student is not included if s/he is not interested in designing dream garments or if s/he cannot buy more expensive clothes. In either way, the student will learn whether (or not) s/he can be recognised as sustainable consumer. To answer the second research questions—How are these narratives communicated to change students' behaviours? — the analysis was deepened with the aid of social marketing and the concepts of *exchange*, *target group segmentation,* and *competition*. Under the results we have also shown how the educational material uses social marketing as a strategy to change student's behaviours.

The educational material even provides assessment suggestions and links these to the Educational Sloyd curriculum (i.e., what is a grade A, representing the highest mark, and what is a grade E, representing lowest mark). The use of social marketing while at the same time providing grading suggestions becomes an ethical question and one can wonder whether this is something that schools should engage in. There is a potential victim-blaming when some actions are promoted as 'good' and other are not. Another risk that can arise is that students do not have the opportunity to absorb the behavioural message. In social marketing, it is important that the target group can receive the message intellectually; that there is a certain autonomy. But also, the target group must have the resources needed to achieve the behaviour change (buy a gym card or choose more expensive food and clothes that in the long run are more sustainable). Otherwise, there is a risk of involuntary exclusion; especially if the concept for marketing is a lifestyle that will save humanity. In short, if you want to be a sustainable consumer you need to not only agree with the ways in which the material promotes sustainable consumerism but also have the resources needed to make the change. This is not the case for students in 7th–9th grade and therefore it is questionable whether social marketing should be used as a strategy in schools. In response, we argue that what educational material does needs to be acknowledged. To discuss how to educate students in sustainable consumerism, we turn to EE research and design literacy research to discuss three things: (i) the everyday experiences of clothing as design literacy; (ii) 'wicked' problems and design literacy; and (iii), post-growth design literacy.

The everyday experience of clothing as design literacy
When it comes to the topic of sustainable clothing consumerism, there are no easy answers. If we start with clothing as a subject matter, clothes are something that we all need. They are also something that we use every day. In other words, clothes are something that concerns everyone. But there is no consensus on how clothes come to matter practically in our lives. Whereas some students may think that clothing is a way to express themselves, express who they are or want to be, others may maintain that clothing is something that "just needs to work". That is, clothes are made meaningful due to their functions. This could, for example, mean that clothes should be comfortable and feel nice on one's body or, perhaps for some people, clothes are at their best if they are not noticed at all. Accordingly, even though we all wear and use clothes—it is part of our everyday experience—the meaning that is made with clothes differs. The meaning that is made in the educational material is focused on two overall actions, to have fun and to feel clever. If we look at the sustainability issue—the framing of becoming a sustainable consumer—the social marketing analysis show that changing behaviours is about purchasing behaviours. As an alternative, Lutnæs (2021) identified how narratives for design literacy could be a source of everyday experience with clothes; that is, with clothes (1) we experience awareness through making, (2) experience and empower change and citizen participation, (3) experience the complexity of real-world problems, and (4) participate in the design processes. But rather than define the meaning beforehand that one should have fun or be smart, the teaching could start by asking the students to decide what is valued as good sustainability actions based on their experiences with clothes.

Post-growth design literacy
One of the examples in the analysis states that one can have fun without buying clothes and another example is that one can buy clothes in a smarter way, such as clothes that will last. The sustainability problem is therefore solved by changing purchasing behaviours. However, according to design research, there are other ways educational activities can address sustainable clothing where consumerism is not the starting point. For example, Fletcher (2016) suggests that design knowledge and the perspective on craft of use can, according to Fletcher, contribute to a post-growth fashion. Post-growth fashion is not focused on individualistic consumption, but rather on the way in which people make meaning with clothes when they use them. Another example from design research on other ways to address sustainability is provided by Fry and Nocek (2021) and their argumentation that design has caused much of the environmental crisis that we see today, and as an alternative they propose other ways of thinking about design and what it means to inhabit the world through design. By questioning design itself, in particular the division of the designer and the object (from a clothing one can address it as questioning

the division of the user and the garment) could open up what Fry and Nocek define as other 'life-worlds'. As we see it, these other 'life-worlds' of clothing could be a source and a starting point to address how students make meaning with clothes that goes beyond consumerism. These life-worlds may also create a space for both hope and grief, if they enable the communication of shared difficulties and vulnerabilities (Lindström, Jönsson and Hillgren, 2021) and not only promote an emotional state of optimism.

Wicked problems and design literacy

The question of for *whom* something is sustainable is one of the core aspects in EE research (Jickling, 1992; Öhman, 2008; Scott & Gough 2003; Van Poeck, 2003). If the teaching (i.e., the educational material) states that this is a smart sustainability choice, we need to acknowledge who is included in that choice. The most certain answer when asking this question, is that it depends. What might also happen is that the question of sustainable clothing consumerism can be understood as a 'wicked' problem (a solution creates another problem). Focusing on how the problem is framed and responding to that, is what Cross (1982) argued is what a designerly way of knowing is all about. This does not mean that the designerly way of knowing gives straightforward answers. On the contrary, by digging into the question students must explore the solutions by making them the core of the educational activity. One way to dig into the question is Kronlid's (2021) four styles for dealing with wicked problem. Rather than thinking that education should help student fix environmental problems, such as overconsumption of clothes, there are different ways teachers can address these issues. If we think about clothing consumerism as a matter that actually can be solved, which is the first tactic, the purpose of the teaching activity is to help students to find solutions based on facts. For clothing consumerism this can be manifested as learning more about both clothing and consumerism and, based on these facts, making the best choice. In the second tactic, the starting point is that the problem rests on false premises and is therefore the problem is badly framed. The purpose when dissolving the problem is to find new ways of dealing with the problem that are more accurate. In both styles, solving and dissolving, there are solutions available. In the other two solutions, pressing and resolving, there are no solutions. This, however, does not mean that we should not engage with the problems, but the educational purposes are instead to help students to deal with the wickedness of the problem. By pressing the problem, which is the third tactic, the purpose is to delve deeper into the problem and see how it is unsolvable. When pressing the problem, the teaching activity enables the student to avoid shallow solutions, to see the complexity and realise that these questions might always exist. In the fourth tactic, resolving the problem, the purpose is to reconcile the problem and learn to live with it. This does not mean that nothing can be done, but the educational purpose is to find ways of reconciliation.

CONCLUSION

In the paper we have sought to problematise education on sustainable clothing consumerism by shedding light on aesthetic judgment and the issues that arise when modification of student's behaviours is attempted via social marketing. We have demonstrated how narratives about sustainable clothing consumerism are constructed in the educational material *Sustainable Fashion* and how these narratives are conveyed through social marketing. We argue that these narratives deserve attention because they create stories that include certain students while excluding others. This could mean that not all students feel invited to embrace sustainable clothing consumption. For example, if you do not find clothes enjoyable or do not agree with the rational choices presented in the educational material, you may learn that you do not fit into the narrative of a sustainable clothing consumer. Our mission is not to argue that sustainable consumerism should be devoid of norms. On the contrary, we assert that the norms and behaviours associated with being a sustainable clothing consumer need to be illuminated to show different sustainability stances. In the paper, we have also suggested that design literacy can be helpful when teaching about sustainable clothing consumerism. We have focused on three perspectives of design literacy. The first perspective of design literacy centres on students' everyday experiences, starting from their clothing experiences. From these experiences, new knowledge about sustainability

can be generated through activities such as making, and citizen participation, allowing students to engage with the complexity of real-world issues or participate in the design process (Lutnæs, 2021). The second perspective of design literacy challenges the individualistic consumption by offering alternative ways to exist in and interact with the world through clothing. This is, for example, achieved by focusing on *the use* of clothes (Fletcher, 2016) or by engaging with clothes, not merely as "objects" created by designers that students purchase and wear; instead, clothes become integral parts of student's 'life-worlds' (Fry and Nocek, 2021) that transcend consumerism. The third perspective of design literacy addresses the educational aspect of teaching sustainable clothing consumerism. It emphasizes that education cannot be viewed as a ready-made solution when teaching about sustainability problems. Instead, it highlights four different teaching approaches to handling wicked problems and designerly ways of knowing (Cross, 1982). These four teaching approaches include solving, dissolving, pressing and resolving the problem (Kronlid, 2021) and serve to delve deeper into the wicked problems of sustainable clothing consumerism. These three perspectives of design literacy are examples that we believe can inform educational activities and enable students to gain a deeper understanding of sustainable clothing consumerism in design and craft education.

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