IN TIMES OF SOCIAL UPHEAVAL, CAN TEACHERS BE THE ADVOCATES OF CHANGE?
— AN INVESTIGATION INTO THE EDUCATION ON SUSTAINABLE CLOTHING CONSUMPTION AT SWEDISH UPPER SECONDARY SCHOOLS.

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Fashion Marketing and Management

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Laura Brüggen
Title: In times of social upheaval, can teachers be the advocates of change? An investigation into the education on sustainable clothing consumption at Swedish upper secondary schools.

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Supervisor: Prof. Daniel Ekwall

Abstract

Purpose – The aim of this study is to determine in which ways teachers of upper secondary schools in Sweden need to be supported in order to educate students on sustainable clothing consumption.

Design/Methodological Approach – Empirical data was collected through semi-structured, qualitative interviews with teachers from upper secondary schools in Sweden investigating on their view on sustainable clothing consumption and their teaching methods.

Findings – Consumers can shape social environments through their clothing and thereby influence the perception of clothing consumption. However, the human desire of belonging and connectedness within a consumer culture has led to the severity of overconsumption. This is particularly apparent in the dynamic and trend-sensitive field of clothing. Such acts of consumption have a strong impact on the transformation of the Earth’s climatic condition. Nevertheless, global environmental issues are often an elusive picture of the climate crisis what makes it difficult for individuals to associate own lifestyles to it. To combat this dissonance and with Generation Z as the consumers of change, this study focuses on teachers of upper secondary schools and the ways they can be supported in the education on sustainable clothing consumption. For this, eight specific categories of investigation have been crystallised through the data collection, such as sustainable development, teaching and transdisciplinarity, sustainable clothing consumption, lifestyles, social anxiety, overconsumption, mindfulness and teaching materials for sustainable clothing consumption. Within those categories, teachers provided their understanding of how sustainable development is implemented in the Swedish education system and how sustainable clothing consumption could interlink individual contributions to environmental issues. A desired collective shift is facilitated through knowledge development that on the one hand is significant in the students’ perspective but on the other hand is also relevant for teachers within their proficiency and beyond. With a resulting concept of education on sustainable clothing consumption and transdisciplinary teaching, teachers shall be aided in their duty to encourage their students to become responsible citizens.

Originality/ Value – This work creates value by investigating how the sustainable consumption of clothing can be anchored in the society through early school intervention. The study will provide interesting insights into how the conscious use of textiles can be taught through different teaching formats and what needs to be done to support educators in this.

Keywords – Sustainable Development, Education on Sustainable Consumption, Sustainable Clothing Consumption, Teacher Training, Generation Z, Upper Secondary Schools
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<th>Abbreviation</th>
<th>Description</th>
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<tbody>
<tr>
<td>Cf.</td>
<td>Conferre: Referring the reader to other sources</td>
</tr>
<tr>
<td>CO2</td>
<td>Carbon Dioxide (Greenhouse Gas)</td>
</tr>
<tr>
<td>EE</td>
<td>Environmental Education</td>
</tr>
<tr>
<td>e.g.</td>
<td>Exempli gratia = for example</td>
</tr>
<tr>
<td>ESC</td>
<td>Education on Sustainable Consumption</td>
</tr>
<tr>
<td>ESCC</td>
<td>Education on Sustainable Clothing Consumption</td>
</tr>
<tr>
<td>ESD</td>
<td>Education on Sustainable Development</td>
</tr>
<tr>
<td>Gen Z</td>
<td>Generation Z</td>
</tr>
<tr>
<td>Ibid.</td>
<td>Ibidem = close previous citation from same source</td>
</tr>
<tr>
<td>i.e.</td>
<td>Id est = that is to say</td>
</tr>
<tr>
<td>IPCC</td>
<td>Intergovernmental Panel on Climate Change</td>
</tr>
<tr>
<td>NGO</td>
<td>Non-Governmental Organisation</td>
</tr>
<tr>
<td>RQ</td>
<td>Research Question</td>
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<tr>
<td>s.</td>
<td>See also</td>
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<tr>
<td>SCA</td>
<td>Swedish Consumer Agency</td>
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<tr>
<td>SC</td>
<td>Sustainable Consumption</td>
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<tr>
<td>SCC</td>
<td>Sustainable Clothing Consumption</td>
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<tr>
<td>SCCS</td>
<td>Sustainable Clothing Consumption Strategies</td>
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<tr>
<td>SD</td>
<td>Sustainable Development</td>
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<tr>
<td>SDG</td>
<td>Sustainable Development Goals</td>
</tr>
<tr>
<td>SEPA</td>
<td>Swedish Environmental Protection Agency</td>
</tr>
<tr>
<td>SI</td>
<td>Swedish Institute</td>
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<tr>
<td>SNAE</td>
<td>Swedish National Agency for Education</td>
</tr>
<tr>
<td>TD</td>
<td>Teacher Digit</td>
</tr>
<tr>
<td>UN</td>
<td>United Nations</td>
</tr>
<tr>
<td>UNDESd</td>
<td>United Nations Decade of Education for Sustainable Development</td>
</tr>
<tr>
<td>UNEP</td>
<td>United Nations Environment Programme</td>
</tr>
<tr>
<td>UNESCO</td>
<td>United Nations Educational, Scientific and Cultural Organisation</td>
</tr>
<tr>
<td>UNFCCC</td>
<td>United Nations Framework Convention on Climate Change</td>
</tr>
<tr>
<td>VCC</td>
<td>Vicious Consumption Cycle</td>
</tr>
<tr>
<td>WCED</td>
<td>World Commission on Environment and Development</td>
</tr>
<tr>
<td>WWF</td>
<td>World Wildlife Fund</td>
</tr>
<tr>
<td>10YFP</td>
<td>10-years Framework Programme</td>
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Throughout this thesis, the reader will come across the listed terms and their abbreviation. The author took the liberty to make use of either written out or abbreviated form as far as it suited to the flow of reading.
1 Introduction

The first chapter provides fundamental insights for the reader to understand the status quo of the Swedish consumer culture and school landscape. In addition, the reader is introduced to the factors that require a change in the consumption behaviour of the Generation Z.

1.1 Background

The future is happening now. The most recent United Nation’s (hereafter UN) report of the Intergovernmental Panel on Climate Change (hereafter IPCC) is clear in two messages: the need for change has never been so urgent as it is today, and this particular change ideally reduces CO2 emissions\(^1\) by 45\% by 2030 to continue a civil existence on this planet (IPCC 2018). At the same time, global clothing consumption is estimated to increase by 63\% within the next ten years, equivalent to 500 billion additional T-shirts that are unlikely meant to equip future generations (GFA and BCG 2017). Facing this, documentaries like ‘The True Cost’ (2015), ‘Minimalism’ (2016), and ‘Tidying Up with Marie Kondo’ (2019) entered popular streaming platforms. The first intends to create awareness about contemporary disastrous conditions of the clothing industry, the latter gives examples of how to live a meaningful life with less possession, however, all those documentaries have the ubiquitous topic of overconsumption in common. It becomes obvious that the way consumption is practiced today is not only highly challenged, but as a matter of fact, it poses a threat to humanity’s long-term qualitative survival.

Solomon et al. (2002) clarify that consumption becomes meaningful by being the tool for identity creation, differentiation and the projection of symbolic power. Moreover, Campbell (2004) describes a permanent desire or longing for satisfaction that is temporarily stilled by consumption, accompanied by the experience to feel this need over and over again. Niinimäki (2011) declares the pursuit of constant change and novelty as the core of clothing consumerism. With consumption as a social practice, such needs are questioned in their nature if they are autonomously defined by individuals or if social systems govern the seemingly ‘free choice’ and mediate a society’s way of life (Slater 2008; Álvarez-Suárez et al. 2013).

In the last decade, Sweden’s clothing and textile consumption has increased by over 40\% (SMED 2011). A study from 2012 revealed that 62\% of the Swedish population invested into clothing at least once quarterly, from which 80\% belonged to the age group of adolescents between 16 and 19 years (Ekström 2013). A reason for this consumption pattern is the omnipresence of advertisers infiltrating and steering societal norms with fast fashion as prominent driver (Álvarez-Suárez et al. 2013). Referring to the insatiable need for newness, since the 1980s the era of fast fashion and an increase in wealth created a culture of impulse buying; where the idea to be fashionable appears more relevant and accessible than ethical or

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\(^1\) CO2, or carbon dioxide, is described as an invisible and odourless gas “formed by combustion of carbon and in the respiration of living organisms” (OECD 2017). Considered as a greenhouse gas, it accounts for about three fourths of the causes for the Earth’s transforming climate (Gale 2009).
sustainable concerns (Mintel 2007; McNeill and Moore 2015; Wahnbaeck and Roloff 2017). Solér declares Sweden as “a very trend sensitive country” (2017) where the cultural ethos of equality is embodied by the capacity to consume. As one of the wealthiest nations worldwide, Swedish consumers² pick up on the newest products very quickly. This further leads to the revelation that while already possessing everything, the motivation to consume more is closely related to meaningful social experiences and group affiliation. Especially in adolescence, clothing consumption plays a significant role for self-realisation and social belonging purposes (Lindgren et al. 2005). As a consequence, the ephemerality of fashion trends is embodied in garments, symbolically and physically, which leads to “a sense of psychological obsolescence” (Niinimäki 2011, p. 36) that is felt by the consumer. Thereby, the fashion item gets replaced by a new one to strike a consumer’s changing identity which is but another consequence for excessive consumption.

Easily left out of sight, clothing consumption practices reach beyond the purchase, use, maintenance or disposal of garments. But even a responsible consumer possibly remains unaware of the connection between his newly acquired item and of the natural and human resources³ involved to produce it (Isenhour 2010a; Hiller Connel and Kozar 2014). It is further estimated that the clothing industry contributes to almost 10% of global carbon emissions, which make out more than all international flights and maritime shipping combined (UNFCCC 2018). The social and environmental costs, respectively the true costs of garments, are intentionally kept secret to those that could not know better (Thorpe 2015). It further supports the assumption that environmental concern is not necessarily connected to environmental knowledge and resulting clothing consumption behaviours (Butler and Francis 1997; Hiller Connel and Kozar 2014).

The fact that by 2050, Swedish consumers must cut on their emissions by 80% in order to prosper within the boundaries of the planet reveals a significant numeric relevance (Naturvårdsverket 2015). Yet it is the elusive picture of CO2 emissions that obstructs the average consumer to associate individual lifestyles with underlying environmental problems. Olofsgård (2015) speaks from a cognitive dissonance that appears as soon as individual world views are challenged with evidence the receiver is reluctant or not able to translate. Especially in the lens of environmental concerns, this state of mind appears naturally amongst laymen confronted with scientific explanations. In order to restore confidence in the collective force to change the future, the area of sustainable clothing consumption shall establish a profound comprehension of environmental conditions. It is further intended to provide consumers with the necessary skills and knowledge to finally turn the intangible image of the Earth’s critical condition into one that is traceable.

² The ‘consumer’ refers to students, teachers and citizens in general.
³ Chapman (2015) defines resources as a matter that is relevant for commercial use and points out that such “are being transformed at a speed far beyond the natural self-renewing rate of the biosphere” (p. 78). Ethically questionable working conditions, i.e. the exploitation of human dignity, are just another prominent feature of the clothing industry (Gwilt and Rissanen 2011).
Nevertheless, not everyone flees in ignorance for fear of the unknown. An example of the current zeitgeist of activism for radical change are students from all over the world that begin to strike for climate action (Fridays for Future). Inspired by the 16-years-old climate activist Greta Thunberg from Sweden, the terrifying prospects of the future are confronted with an understanding that the actions of the present decide on the world’s continuing narrative (Carrington 2019). Yet according to Watts, the way the climate crisis is incorporated in schools’ education is likely treated as “a peripheral subtopic of subjects like geography and science” (2019). Teachers in solidarity to their students demand reformations in national curricula and more support to collectively approach environmental challenges with more confidence and optimistic vision (ibid.).

With this in mind, to preserve a thriving future on this planet, systemic cultural shifts are indispensable. Accordingly, rethinking lifestyles and individual choices play a crucial role in achieving such a transformation. The UN’s Educational, Scientific and Cultural Organisation (hereafter UNESCO) declares education as a major supportive measure to empower people to transform and challenge conventional behaviour patterns (UNESCO 2019). This goes in line with Hiller Connel and Kozar (2014) who suggest that education and resulting knowledge development are two key factors that enhance consumers’ commitment to environmentally sustainable clothing consumption.

Barth et al. (2012) describe schools as “both a place of learning and a social environment in itself” (p. 304) which offers great opportunities in socialising students for sustainable clothing consumption. This has also been acknowledged by the Marrakech Task Force on request by the UN Environment Programme (hereafter UNEP) that conceptualised a guideline on Education for Sustainable Consumption (hereafter ESC) with the 10 Year Framework Programme (hereafter 10YFP) as a supporting incentive (UNEP 2012). Adolescents in the age of 16 to 20 are at the threshold of becoming active citizens and require cross-generational assistance and encouragement for a future that is worthwhile to fight for (Boeve-de Pauw et al. 2015). With clothing as everyday objects and its consumption as a tool for identity creation, garments are an accessible and visible material to explore and express change. Hence, it is only a matter of time to focus on teachers as advocates for sustainable clothing consumption to raise the awareness of how individual, responsible acts potentially affect a collective societal transformation for the benefit of the environment.

To provide a fundament for this thesis’ empirical investigation in the perspective of teachers from upper secondary schools, the following subchapters will contribute to the readers’ contextualisation of the Swedish setting. Firstly, the context of clothing and consumption is clarified that secondly, supports the comprehension of the Swedish consumer culture. Insights into the era of Generation Z will make the reader empathise with the educational mission teachers have to fulfil. In correspondence to this, the Swedish school system will be looked at with a closer examination on upper secondary schools. Subsequently, diverse educational
concepts and teaching methods will be introduced to show the existing framework in which changes in consumer behaviour can be brought about.

1.2 Terminology

1.2.1 Clothing vs. Fashion

This thesis focuses primarily on the aspect of clothing since garments are next to food and smartphones assumed as a core good that adolescents attending Swedish secondary schools frequently acquire and consume for self-creation purposes. Therefore, it is perceived as relevant to elucidate the context of clothing in the meaning of consumption which will be revisited in the subsequent chapter of the Swedish consumer culture.

Kaiser (1998) emphasises the significant relevance of clothing to the everyday life as a tangible or material object which is due to its matter-of-course appearance noticed and analysed almost unconsciously. Niinimäki (2011) defines clothing as something very intimate due to its closeness to the human body by simultaneously connecting external social roles with the inner self, also seen as identity. She further describes it as an “embodied experience that is socially constituted and situated” (2011, p. 38) merging the levels of apparel, body and self as layers of social context (Entwistle 2000). Be it in the own wardrobe, other people or in the media, the human eye is constantly and on a daily basis confronted with clothes.

Moreover, clothing is often equated with fashion in everyday language. Yet it is of importance to ascribe fashion a symbolic meaning it attaches to the materiality of clothing. Accordingly, the concept of ‘fashion’ functions as the dynamic intermediary between a consumer’s individual personality and how this personality is worn to the external world (Kaiser 1998; Barnard 2002; Niinimäki 2011). Furthermore, Wilson (1985) describes fashion as the epitome to change that constantly transforms within a fashion cycle; in other words, it refers to how trends enter the market. Fletcher (2008) links fashion to time and space and while dealing with emotional needs it manifests humans as social beings and hence lays at the heart of culture.

However, due to political economies that “evolved according to materialistic measures of human well-being” (Ehrenfeld 2015, p. 58), material wealth has become a cultural norm. Thorpe (2015) emphasises this complex of problems “through the advertising and marketing of profit-maximizing entities” (p. 70) that steer social meaning and purpose through objects (clothing). By determining actual and desired conditions (fashion), material consumption is motivated and often perceived as the only chance to happiness, also defined as ‘conspicuous consumption’ (Fletcher 2008; Chapman 2015). Therefore, fashion in its emotional and evolutionary relevance possesses the power to “feed[..] insecurity, peer pressure [and] consumerism” (Fletcher 2008, p. 118). Based on these assumptions, this thesis concentrates on clothing as material objects that in consumption processes refer to the symbolic meaning of fashion items in socio-cultural contexts.
1.2.2 The Fast Fashion Conundrum

The previous chapter portrays the picture of fashion in relation to the steady human desire to create individual identities. For this purpose, the symbolic meaning of garments is of more value than their materials’ origin (Clark 2008). The lack of awareness and understanding of the effort to produce clothing objects is a common consequence of the fast fashion consumption (McNeill and Moore 2015). The (fast) fashion cycle benefits from the fundamentals of human psychological functioning (König 1974) that are “curiosity, inquisitiveness, and receptivity to things new” (Lynch and Strauss 2007, p. 14). According to sociologist René König (1974), the sense of sight is the primary sense utilised by humans, which also explains the enthusiasm of “visual sensations created by a new fashion look” (2007, p. 15) and thus, provides an excellent platform for fast fashion companies to refer to.

Short product lifecycles are the result of fast fashion’s rapidness: over the last 15 years, the average person consumes 60% more fashion objects, whereas the utilisation of clothing has decreased by 36% (Ertekin and Atik 2015; Ellen MacArthur Foundation 2017). This is particularly driven by the globally increasing middle-class population that spends their disposable income on garments being offered to very low prices (Wahnbaeck and Roloff 2017). Still, fast fashion comes at a cost. With its widespread and complex supply chains, the clothing industry touches on multifarious environmental and social issues and in conventional business-making it is governed by the typical take, make and dispose linearity (UNFCCC 2018). Next to being cheap and mass-available, fast fashion items are mostly designed to be worn less than 10 times until they either break or are out of fashion (McAfee et al. 2004). The underutilisation of garments is a significant indicator for the wasteful nature of today’s society with the increase of wealth as another key cause for overconsumption (Ellen MacArthur Foundation 2017).

Fast fashion consumers hardly notice that strategic and emotional advertising methods potentially commercialise identities and alienate individuals from their authentic selves. Even though identities are based on individual decisions, the transitional phase between the conscious and unconscious mind provides accessible areas for marketers to bias opinions and desires (Curtis 2002). Homogenised tastes form the basis for the overproduction of garments, which are actually supposed to do the contrary, to promote the exclusive (Wahnbaeck and Roloff 2017). When clothing consumption is perceived as a collective behaviour, the artefact of clothing as such has been exploited in its worthiness since bargains function as a catalyst to social acceptance (Fletcher 2008).

In times of accelerating global challenges and the raising awareness of the clothing industry’s excessive consumption of resources like energy and water, linearity is proven as the enemy to the Earth’s preservation (UNFCCC 2018). Inspired by the circularity of nature systems, the concept of a circular economy is perceived as the revolutionary tool towards a fashion future that minimises the use of virgin resources and improves production processes efficiently (Ellen MacArthur Foundation 2017). However, on a planet with finite resources, Isenhour (2010b) calls it ironic to tackle the issues of overconsumption with innovation and still foster economic
growth and thereby more consumption. According to Campione “real change is not going to happen without investing in […] strategies to extend the life of clothing” (2017). Once consumers begin to understand the conundrum between easily accessible fast fashion and their altruistic morals for social and environmental justice, a new sense of responsibility for clothing and its maintenance is established (McNeill and Moore 2015). This responsibility can be further seen as an act from within that does not respond to the pressures of society and simultaneously benefits the environment (Ehrenfeld 2015; Grimstad Klapp and Laitala 2015).

1.2.3 The Swedish Consumer Culture
According to the author’s perspective, the idea of a consumer culture is that of the satisfaction of needs and to establish a ‘good life’ by consuming commodities with symbolic meaning expressed to others. Yet according to Slater (2008), a consumer culture “associates satisfaction with socio-economic stagnation: there must be no end to needs” (p. 100). Accordingly, production systems aspire an insatiable demand for more, and they form their own catalyst by creating products that are satisfying for a short time and make consumers want more – thus leading to continuous buying. With social media as an omnipresent marketing channel, Wahnbaeck and Roloff (2017) ascribe advertising as the core tool for “wrapping up products with emotional stories” (p. 8). In this way, consumption is seen as a medium to cultivate relationships with others and thereby fulfils the human desire of connectedness. Through the theoretical contribution by Slater (2008) and Wahnbaeck and Roloff (2017), the author created a vicious consumption cycle (hereafter VCC). The VCC (Figure 1) characterises the exploitation of a consumer in his rarely rational consumption behaviour through emotionality and impulse.

Figure 1 Visualisation of the VCC inspired by Slater (2008) and Wahnbaeck and Roloff (2017). (Illustration made by author)
Sweden preserves a strong consumer culture and is seen as a highly competitive economy, providing its citizens with a high standard of living with economic growth as a national priority (World Economic Forum 2010). Its ecological footprint is destined to grow drastically in the upcoming years with consumption as a main driver. Sweden requires between 5 to 7 global hectares biocapacity per person, which is about four times the resources the planet can regenerate and the waste it can manage (WWF 2018). The Swedish Environmental Protection Agency (hereafter SEPA) states that Swedish citizens evaluate their consumption habits more consciously and are more concerned about their environmental impacts compared to other European countries (Naturvårdsverket 2015). Nevertheless, Swedes also witness difficulties when it comes to their consumer-based lifestyles since their possessions act as “symbols of cultural capital, […] social status, and personal values” (Isenhour 2010b, p. 513). Sweden’s consumer culture is complemented by conformity, where behaviours and attitudes are preferably matched to group norms. This can be traced back to the egalitarian ethos that evolved in the Scandinavian culture, giving precedence to values such as equality, solidarity and fairness for all people (Gullestad 1989; Isenhour 2010a).

With the observance of peer groups, “adults […] spoke about social pressures they feel to consume, to live like others and to keep up with the latest trends” (Isenhour 2010b, p. 463). Regardless of how strong environmental values are, cultivating social belonging via possessions and the display of taste appears more crucial to a Swedish citizen (Bauman 2001; Isenhour 2010b). The cultural context is significant in order to understand certain consumption habits that derive from social norms and beliefs. According to cognitive developmental theories, adolescence is shaped by the emergence of a reflective consciousness that questions encompassing patterns and views through abstract thinking (Adler and Turley 2019). Consumer socialisation is the process in which young people acquire knowledge and skills that shape their own behaviour as consumers (Ward 1974). Apart from that, it is the reflexive self that prevails in a constant rebuilding process that is easily influenced by the dynamics of fashion (Niinimäki 2011). Hence, consumer socialisation also describes how consumers adapt and contribute to societal transformations. It is of value to consider potential consumer socialisation interventions during adolescents’ stage of growth in the face of sustainable clothing consumption (Ekström 2015a).

Furthermore, it appears crucial to increase the awareness of how trends and marketing systems trigger stimuli and temptations that within the ‘moral calculus’ (Wilk 2010) can slow down environmental concerns in relation to the desire of social satisfaction. Hence the question arises, whether the knowledge of clothing product life-cycles and their socio-environmental impact can revolutionise contemporary consumption patterns and promote the shift to more sustainable lifestyles.
1.2.4 Generation Z

As descendents of the Millennials, Generation Z (hereafter Gen Z) members are born between 1995 and 2010 as true digital natives (Francis and Hoefel 2018). According to Francis and Hoefel, it is a “hypercognitive generation very comfortable with collecting and cross-referencing many sources of information” (2018). In addition, they are the first generation to fully experience traces of social and environmental activism especially in the clothing industry (s. Eco Age; Fashion for Good; Fashion Revolution) and the tendency for purchasing sustainable and ethical products (Kestenbaum 2017; Francis and Hoefel 2018). Merriman explains it quite clearly by saying that “generations are born from cultural shifts, rather than a […] cycle that automatically changes every decade” (2018). It is of significance to perceive generations in the context and zeitgeist on which they shape their understanding of the world.

Millennials are entitled as the ‘Me Generation’, born in economic stability and the emergence of the internet. Their roots in Generation X preserving values such as capitalism, materialism and status, they have already set first steps into the direction of demanding authenticity and trustworthiness of clothing brands and economic systems. Nevertheless, their engagement is rather superficially and especially driven by price and convenience (Kestenbaum 2017). In contrast, Gen Z appears to be more attentive when it comes to environmental and ethical issues. According to Philip (2018), they do not relent from scrutinising national and world authorities to finally prioritise the future of this planet. Francis and Hoefel (2018) redefine Gen Z as ‘True Gen’, making their form of consumption as a quest for truth, both personally and communally. Amed et al. (2019) underline the newly coined phrase of ‘woke consumers’ that is defined as “alert to injustice and society” (ibid.). For Gen Z, environmental and social concerns do not go unnoticed for long. Information about the climate crisis is easily available, making also laypersons increasingly realise its severity (Wiles 2018). With Gen Z as realists, they believe in the virtue of dialogue to overcome conflicts and to improve the world (Francis and Hoefel 2018).

Sweden promotes a scientific and political consensus when it comes to acknowledging the anthropogenic view⁴ on the climate crisis. This revelation is spread out nationally due to progressive policies and other awareness campaigns reaching out to the citizen as a consumer (Isenhour 2010b; Naturvårdsverket 2011; GOS 2018). With a new generation, a systemic cultural shift is expected to flourish within the age of information. Nevertheless, even though Gen Z appears as very sophisticated in the way they view and reflect on global events, it does not mean that they are freed from societal norms and prevailing capitalistic economic systems. Moreover, Gen Z grew up with fast fashion and is socialised with its associated marketing and advertising strategies and its lucrative affordability (Brooke 2018).

By 2020, Gen Z comprises 40% of global clothing consumers. Amed et al. proclaim a new global ethos where “people are using consumption as a means to express their deeply held

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⁴ The Anthropocene verifies a new geological epoch of humans’ impact on the Earth’s climatic condition and transformation (Blasdel 2017).
beliefs” (2019). Ekström (2015) questions whose responsibility it is to encourage people to function as better consumers. One approach according to Álvarez-Suárez et al. (2013) is that the knowledge and competence for sustainable clothing consumption behaviour rely on teaching interventions that build public awareness about local and global environmental impacts. Apart from individualism, a cross-generational pursuit for better consumption behaviours is needed. To achieve this, the next generation needs to be supported by experience and expertise to lighten the weight that has been laid on Gen Z as consumers of change (Lindgren et al. 2005).

1.3 The Swedish School System
Due to the nationally dependent conceptualisation of school systems, it is essential to become acquainted with the Swedish school system as a focal area of this thesis. Therefore, the following sub chapters will distinguish the concept of Swedish upper secondary schools, the learning environment of Gen Z, as well as its corresponding syllabus and curriculum requirements.

The Swedish school system is a goal-based system regulated by the Swedish Education Act which ensures that every child in Sweden has an equal access to free education (SI 2013). The Swedish National Agency for Education (hereafter SNAE), in Swedish known as Skolverket, acts as a central administrative authority whose mission is to ensure a consistent, motivating and sufficient learning environment for children and adults in Sweden. By attaining the national goals of the Swedish Government and Parliament, the agency provides regulations, knowledge requirements, national tests and general recommendations and is further responsible for national development programmes independent (autonomously or publicly funded) and municipal schools can orientate on. In addition, the SNAE administers in-service training for teachers and head-teachers in order to maintain a high-quality standard of education (SNAE 2013; SI 2015).

The main aim of the education in Sweden is to preserve the basic democratic values Sweden’s society is based on, as well as it should promote a lifelong desire to learn and continuously develop one’s own capacities of growth. With the school as a social and cultural meeting place, the SNAE (2013) mentions fundamental values and tasks for schools to consider in their approach. Amongst such, the “inviolability of human life, individual freedom and integrity, the equal value of all people, equality between women and men, and solidarity between people” (2013, p. 4) are counted as priority. With traces of Western humanism and Christianity, an individual sense of tolerance, justice, generosity and responsibility shall not only guide teaching as non-denominational, but also encourage students to create the best versions of themselves by actively participating in the society. Accordingly, the development of students’ “ability to think critically, examine facts and relationships, and appreciate the consequences of different alternatives” (SNAE 2013, p. 5) remains an essential part.

In 2011, the education system went through institutional changes that opened up more local authority and flexibility, where schools themselves can identify new education needs and adapt
their programmes accordingly. Hence, teachers and institutions can decide on materials and methods that suit best to their education strategy, while still embracing the national framework. The SNAE is then accountable for quality assurance and control (Government Bill 2008/09, p. 199). It is important to consider that every school needs to deliver an action plan that concretely states how it aims to meet national objectives and goals, as well as the “responsibility of developing and improving teaching” (UNESCO-IBE 2011, p. 9).

Lastly, the SNAE (2013) enunciates four perspectives education should always persist on: the ethical, the environmental, the international and the historical perspective. These perspectives ideally support a holistic view on contemporary issues by creating an understanding of mankind entering the nature system as a civilisation and encouraging the interdependency of own realities in a global context. This, as a consequence, leads to prospects of sustainable development (hereafter SD) which will be further discussed in Chapter 2.3.

1.3.1 Upper Secondary School
The Swedish school system is distinguished into three transitional phases. It starts off at the age of six with a one-year mandatory preschool phase, in which creative and playful teaching methods initiate learning processes. This eventually merges into the compulsory school students attend for nine years in total. Here, diverse school concepts are aligned to the individual student’s capacities, where also children with specific learning difficulties or other disabilities have the chance to develop their knowledge on an equal, high-quality standard (SNAE 2018). After accomplishing the compulsory school, students have the option to attend the upper secondary school. In general, it is recommended that the compulsory school collaborates closely with the upper secondary school as well as the local community in general, so that the students can gain first hand experiences of the working life and develop under the best possible conditions (UNESCO-IBE 2011).

![Figure 2 Process of the Swedish school system (SNAE 2018). (Illustration made by author)](image)

The upper secondary school is a free-of-charge programme for three years, where currently 18 national programmes are offered. These programmes are categorised into 12 vocational (practical) or 6 higher education preparatory programmes (theoretical), whereas the one prepares students for the working life and the other creates a specialisation for a certain field of higher studies. The common age of students attending upper secondary school is 16-20 years (SNAE 2018). The students can choose individually which programme they wish to attend, yet there are nine mandatory subjects in all programmes such as Swedish, English, Mathematics,
History, Physical Education and Health, Social Studies and Science Studies. They vary in their scope according to vocational or preparatory programmes. Both programmes eventually end with a diploma where specified diploma goals have to be met (UNESCO-IBE 2011).

### 1.3.2 Curriculum, Syllabus and Certification

The curriculum is a steering document that defines the programme objectives as well as corresponding teaching guidelines and is used for orientation and evaluation of the school performance. The Swedish curriculum divides the understanding of competence development into four areas: ‘the ability to’, ‘knowledge about’, ‘understanding of’ and ‘skills in’. Furthermore, the SNAE (2013) draws attention to the complexity of knowledge acquisition, in which facts, understanding, familiarity, skills and experience interact with each other and form different learning conditions. Therefore, the transfer performance within the courses are of particular importance. Since 2011, the Swedish school system updated their curricula and syllabi prescribing more centralised and teacher-led teaching content and also implemented a new grading system from A to E with distinct requirements (ibid.). Furthermore, the SNAE (2013) indicates that the scope of teaching should clarify how a society functions in correspondence to an individual’s way of living which ideally coevolves with the obligatory importance of sustainable development (hereafter SD).

With a curriculum being prescriptive in its nature, a syllabus acts descriptively. Each subject contains a syllabus that describes subject specific aims (SNAE 2013). The government takes care of the mandatory subjects, whereas the national agency for education is then further responsible for the additional subjects (SNAE 2013). The Swedish curriculum shows clear linkages to the UN’s Decade of Education for Sustainable Development (hereafter UNDESD) documents in terms of subject description (Boeve-de Pauw et al. 2015). However, according to a study by Borg et al. (2012) Swedish upper secondary schools still experience potential for improvement when it comes to establishing best practices for SD which is already advocated in Swedish curricula and literature. Mogensen and Schnack (2010) further criticise the constitution of a syllabus that compiles a subject too narrowly, which possibly limits the flexibility of the teaching-learning dynamics within a classroom.

In Sweden, diverse programmes are available which reach from labels and certifications to temporal projects such as the 3-year school development ‘School on Sustainable Way’ by the WWF (Berglund et al. 2014). Certification programmes are beneficial in order to observe and measure performances to certain standards. They can provide guidance and leadership and as well offer incentives to reach certification requirements. Next to businesses and brands that can be a member of eco-initiatives, educational institutions also have the chance to certify themselves for the discourse of education on sustainable development (hereafter ESD). Schools that follow the ‘Eco School’ label aim the reduction of their environmental footprint by giving students a great say in decision making. The programme proceeds in 7 steps that starts with a student-led Eco-committee, over a defined and monitored action plan towards an Eco Code that represents a school’s commitment to the environment. After two years and regular assessment,
schools are able to apply for the Green Flag Award (ESG 2014). The Green Flag is an EU-wide initiative to strengthen green schools and environmental awareness. The award proclaims that students have a voice in environmental management policies of their schools that occur during the previously mentioned 7 steps and reach from the classroom and beyond (Brataas 2017). Another award is handed out by the Swedish National Agency for Education (hereafter SNAE) that rewards schools with a holistic approach for SD. The award is reassessed every three years (Östman and Östman 2013).

1.3.3 Transdisciplinarity and Sustainability

Chapter 1.3 considers the following four perspectives Swedish education should build its principles on: the ethical, the environmental, the international and the historical perspective (SNAE 2013). This disclosure draws a clear line to the components of sustainability that next to the environment, relates to ethics and history through society and culture, and international issues that find their equivalent in economics (s. Chapter 2.1 Education for Sustainable Development for more details). In these regards, several studies have been conducted by now where the means of education and sustainability are approached by transdisciplinarity (cf. Posch and Scholz 2006; Nicolescu 2012; Evans 2015; Tejedor et al. 2018).

Amongst various understandings, according to Kiyashchenko (2012) sustainability searches “for alternative sets of values and knowledge of the world” (p. 90) as a dynamic balance unfolding to specific contexts and dimensions of reality. Accordingly, when conceiving knowledge building, it needs to address a multidimensional world consisting of different systems while considering a collective social and planetary commitment (Grice 2017). For these purposes, disciplinary horizons are broadened by transcending their boundaries, i.e. transdisciplinarily. Only then are the previously described perspectives captured in their essentiality and fostering a holistic approach towards knowledge creation.

Moreover, sustainability requires a reflexive and overarching engagement. Grice (2017) critiques the current “individualistic society and […] single-disciplinary method of problem solving” (p. 28). Viewing knowledge as the result of co-creation, transdisciplinary learning can be seen as the transformative education to tackle global challenges by mutual responsibility (Pavlova 2013). This further relates to Amerigo et al. (2012) that refer to the ‘sensitivity of the other’. It includes the individual, the global community and the physical world either way.

In a nutshell, this thesis perceives transdisciplinarity as an opportunity for educational institutions to support teachers in sharing their knowledge in order for students to a) understand their civic role in different systems and to b) learn the importance of relationships and interdependencies from a holistic point of view with regard to sustainable practices. Kagan (2012) speaks from a “global environ(mental) transformation process” (p. 88, emphasis in original) that is enhanced through transdisciplinarity, specifically considering the relevance of culture. This also exemplifies the beneficial character of transdisciplinarity and the way it can address sustainable clothing consumption in socio-environmental contexts.
1.4 Scope and Purpose

It is a substantial obstacle to make human beings aware of consequences they cannot grasp within their own reality. In other words, the greenhouse gas effect or the extinction of species, for instance, are facts that appear in the media and in reports, but do not yet notably influence own lifestyles in affluent countries like Sweden. Hence, it remains a challenge to create an understanding of how a local commitment affects issues that are often geographically remote. On the other hand, this challenge offers great opportunities in being approached by teachers that have realised own contributions and that possess the expertise to share their knowledge with a generation seeking for hope.

As previously mentioned, upper secondary school students are situated in the threshold to becoming active citizens that within their available assets decide and spend their money autonomously, with clothing as a relevant key product. With clothing consumption as a universal social activity, this thesis lays its attention to that of sustainable clothing consumption that in its deeper sense aims for a cultural shift with the help of a genuine behaviour change for SD.

Therefore, the aim of this study is to determine in which ways teachers of upper secondary schools in Sweden need to be supported in order to educate students on sustainable clothing consumption.

1.5 Research Questions

With the help of acquired background knowledge and collected empirical data, following research questions are aspired to be answered or at least approximated in their essence:

- **RQ 1:** In which ways can the education on sustainable clothing consumption assist teachers in conjunction with their students to approach environmental challenges with more confidence?
- **RQ 2:** What is needed to implement a transdisciplinary teaching approach to educate on sustainable clothing consumption?

These research questions deem to develop good practice in favour of teachers of upper secondary schools with the common goal to educate on sustainable clothing consumption as a societal transformation practice.

1.6 Delimitations

This thesis is delimited to the focal area of teachers from upper secondary schools in Sweden. Sweden is an affluent country that within the lens of sustainable clothing consumption deputises a freedom of choice. Whereas emerging countries start to industrialise and experience economic growth, already wealthy nations are demanded to change their course of action. In this investigation, a sample of schools from Borås and Ulricehamn represent Sweden, whereas the results from other regions may differ due to contextual or cultural differences. A qualitative
inquiry has been chosen to answer the research questions. Furthermore, sustainable consumption is limited to clothing within the scope of this thesis. The author acknowledges that other consumer goods also have an impact on the climate crisis.

2 Framework of Concepts

The second chapter embraces fundamental notions of examined knowledge that is essential for this study's investigation. By referring to concepts, complex matter is viewed exploratory in order to approach the previously mentioned research questions.

2.1 Education on Sustainable Development (ESD)

Throughout the research process and in diverse studies (cf. Scott and Gough 2005; Sandell et al 2008; Jickling and Wals 2008; Berglund et al. 2014) it got apparent that the sphere of education on SD is just as rich in complexity as sustainability is in itself. Thus, it is recommended to define the concept according to the investigator’s point of view in order to facilitate a consensus between the reader and the study at hand, and yet keeping it wide enough to involve various standpoints.

In 1972, environmental issues were firstly correlated with the dynamics of civic development during the UN Conference on the Human Environment that took place in Stockholm, where education was declared as one of the key measures for environmental protection. From that point, two further milestones were set. Firstly, by the Brundtland Commission ‘Our Common Future’ in 1987 that declares SD as “development that meets the needs of the present without compromising the ability of future generations to meet their own needs” (WCED 1987). Secondly, by the Earth Summit in Rio de Janeiro in 1992 (UNCED 1997). The summit’s outcome was that only “a transformation of […] attitudes and behaviour would bring about the necessary changes” (UNCED 1997) with the ‘Agenda 21’ as “a wide-ranging blueprint for action to achieve sustainable development worldwide” (ibid.). Dedicated to the 21st century, grassroots commitment is demanded from local authorities, national and international policymakers, governments, NGOs and especially educational institutions.

From there, several more conventions took place that for an overview will be briefly captured in the following Table 1. Those conventions enabled a steady transition from environmental education (hereafter EE) “aimed at producing a citizenry that is knowledgeable concerning the bio-physical environment and its associated problems” (Stapp 1969, p. 30, emphasis in original) towards ESD as a universal responsibility interlinking local and global challenges (Sund and Öhman 2011). From the Earth Summit in 1992, almost 30 years later the Agenda 2030 from 2015 established 17 Sustainable Development Goals (hereafter SDG) that amongst others include education for sustainable development (number 4) and sustainable consumption (number 12) as essential components (UN 2015).
<table>
<thead>
<tr>
<th>Convention</th>
<th>Outcome</th>
</tr>
</thead>
<tbody>
<tr>
<td>1972 UN Conference on Human Environment, Stockholm</td>
<td>Connection between human actions and environmental issues, Environmental Education towards ESD</td>
</tr>
<tr>
<td>1987, World Commission on Environmental Development (WCED)</td>
<td>‘Our Common Future’, common global ethics, SD</td>
</tr>
<tr>
<td>1992, Earth Summit, Rio de Janeiro</td>
<td>Agenda 21 and appeal to global partnership</td>
</tr>
<tr>
<td>2002, World Summit on SD, Johannesburg</td>
<td>Humane, equitable and caring global society with human dignity for all, start off 10YFP</td>
</tr>
<tr>
<td>2010, Marrakech Taskforce</td>
<td>Report: Here and Now! on ESC + 10 YFP</td>
</tr>
<tr>
<td>2012, Rio+20</td>
<td>Origin of SD Goals and guidelines on green economy policies</td>
</tr>
<tr>
<td>2015, UN on SD</td>
<td>2030 Agenda → 17 Sustainable Development Goals</td>
</tr>
<tr>
<td>2015, Paris Climate Agreement</td>
<td>Nationally determined contributions, keeping global temperature rise below 2°C</td>
</tr>
<tr>
<td>2018, Intergovernmental Panel on Climate Change (IPCC)</td>
<td>Reassessment: Keeping global temperature rise below 1.5°C</td>
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It is essential to consider that each country or region aiming for SD also requires customised approaches, as well as models and tools available in its national circumstances. In accordance with this, a contextualisation is a vital prerequisite for sustainability and SD to become feasible. This context is commonly put into the dimensions of the economy including politics, the local and global society, the environment and cultural and spiritual heritage (WCED 1987; Sandell et al. 2005; McGregor 2009). Nevertheless, the occurring variety of viewpoints towards environmental phenomena often results in a conflict of interests (Sandell et al. 2005; Borg et al. 2012).

Sund and Öhman (2011) focus in their study on how to preserve the universal responsibilities of sustainability and simultaneously address local issues and commitments “that are deeply rooted in history and tradition” (p. 14). Hence, the educational approach for SD specifically aims to encourage learners to think and reflect critically in order to approach the holistic (respectively multidimensional) nature of ESD with an open worldview (Haapala et al. 2014; Grice 2017).

Berglund et al. (2014, p. 320) mention five core values that are significant to be incorporated in ESD:

1) Intergenerational (future generations)
2) Intragenerational (social)
3) Geography (local and global)
4) Procedural (open and fair treatment of all people)
5) Inter-species (importance of biodiversity and ecosystem integrity)
Grice (2017) further suggests that the notion of uncertainty ideally is taken into account during the learning process of knowledge. This shall support and activate a problem-solving mindset that envisions the future with more confidence since environmental issues are often not only unpredictable but intangible for the average consumer (Sandell et al. 2005). Robinson (2010) calls it ‘adaptive resilience’ to stay true to own identities while maintaining the capacity to respond to changing circumstances with integrity (Thackara 2005; Chapman 2015). Similar to Kagan (2012) who denotes resilience as the dynamic transformation of oneself when it means to sustain changes from the inner and outer environments rather than to resist them. Correlated pedagogy and learning environments are described as interactive and learner-centred to enable an exploratory and action-oriented learning (Grice 2017). Transdisciplinary teaching is recommended to include strategies found in words, art, drama and debate to also include creative stimuli to the learning experience (Borg et al. 2002; McGregor 2009). Eventually, by focusing on the reflection of issues rather than teaching subjectively ‘right’ answers, ESD engages in different perspectives that are crucial for SD complexities (Boeve-de Pauw et al. 2015).

Up until today, the UNESCO (2010, pp. 6f) in collaboration with the UNDESD discovered several bottlenecks of ESD in the region of Europe and North America, such as the lack of competences in ESD, the absence of a consensus on a common understanding of ESD, institutional, legislative and policy frameworks requiring adaptation to the needs of ESD and the lack of appropriate ESD teaching tools and research.

2.2 Education on Sustainable Consumption (ESC)

With consumption as a core value of todays’ lifestyles, identities, beliefs, social positions, and even hopes and fears are expressed to others (Cade and Bowden 2011). By being of concern for the individual, they also pose evident risk to environmental stability and in many cases neglect ethical principles. Therefore, ESC functions as an essential complement to the discourse of ESD due to its omnipresence in the everyday life and the psychological spheres, such as cognition and affection, it embraces. The amount of individual decisions that are made throughout a day comprise a substantial sum of values and needs that either happen on own guard or in conformity to social norms. ESC promotes a moral commitment that eventually results in social responsibility concomitantly in favour of the environment (UNEP 2010).

Stanszus et al. (2017) describe ESC as a

greater appreciation of and engagement with notions such as civic agency and citizenship, ethical considerations (e.g. good life, responsibility) and the overall aim to strengthen the capacity of consumers to contribute to a broader societal transformation towards sustainable development (p. 6).

Consumption practices possess the power to add value to lives just as they can adversely affect others due to an imbalanced distribution and exploitation of resources (Sandell et al. 2005). This also means that the needs and desires as depicted in the Brundtland’s definition need to be
understood in relation to what a ‘good life’ (s. Chapter 1.3.3) means to the individual and what is genuinely ‘needed’ by a society (Mogensen and Schnack 2010). The Earth Charter (UNEP 2010, p. 8) mentions three overarching challenges related to sustainable consumption (hereafter SC):

1) to respect the earth and life in all its diversity
2) to care for the community of life with understanding and compassion
3) to adopt patterns of consumption and production that safe-guard human rights and community well-being as well as the regenerative capacities of the earth to ensure that economics activities at all levels promote human development in an equitable and sustainable manner

Isenhour (2010a) clarifies that consumption helps to “signal belonging, mutual understanding, and adherence to shared societal norms and cultural logics” (p. 457). In order to divert human needs sustainably, the root of consumption motivations has to be pulled and examined in its symbolic meaning which is particularly nourished by prevailing economic systems (Goss 2004; Isenhour 2010b). As a holistic concept striving a systemic cultural shift, the statement ‘to do more and better with less’ is a crucial ethos to reconcile economic growth with the capacities of the natural environment.

Furthermore, the UNEP (2010) associates ESC to ‘responsibility learning’ that through education empowers consumers with sufficient information in order for them to make more conscious and differentiated decisions within their freedom of choice. It is significant that potential solutions are communicated and alternatives are made accessible to enable a ‘convenience of action’ as a complementary to already existing lifestyles (Norlund and Garvill 2002; Luckins 2010; Hiller Connel and Kozar 2014). Stanszus et al. (2017) correlate ESC to the concept of ‘mindfulness’, a cognitive and affective learning that by reflexive engagement stimulates consumers to “become more sensitive for their own values, emotions and ensuing actions” (p.7). This also supports the social transition that has to “take[...] place in people’s hearts and minds” (Caden and Bowden 2011, p. 20) and hence, has to begin from within.

Nevertheless, Wilk (2004) and Isenhour (2010b) underline the limitations in trusting the consumer to make good choices only through providing accurate information since behaviours respond to emotional and social triggers in a market. Yet, as soon as it was acknowledged that a sustainable lifestyle does not mean to compromise on one’s own quality of life, sustainable consumption through education will find thriving grounds of implementation.

### 2.3 Sustainable Clothing Consumption

With sustainable clothing consumption as the overarching concept, the initial distinction between clothing and fashion (s. Chapter 1.3.1) generates an understanding of the material- and symbolic dimension that affect aspired sustainable consumption behaviours. Now, it is of interest to elucidate the cultural significance of fashion within biophysical limits, namely, what
environmentally sustainable clothing consumption means in relation to lifestyles and daily actions that determine the course of SD.

According to Fletcher (2008), human empathy$^5$ leads to the understanding of why fashion is important to the individual. She refers to Chilean economist Manfred Max-Neef (1991) who distinguishes the human needs between material and non-material needs. Significant about Max-Neef is his revaluation of fundamental human needs against the logics of economics. His book ‘From the Outside Looking’ investigates in “economics as if people matter” (Socioeco n.d.), questioning the unquantifiable satisfaction of human well-being. There, he speaks on the one hand of subsistence and protection through material, and on the other hand, of affection, understanding, participation, (re-)creation, identity and freedom as non-material. Even though being declared as non-material needs, the pervasive “overlaying of emotional needs on physical goods” (Fletcher 2008, p. 120) by marketing systems is a prominent driver for material consumption and waste creation and hence, an indicator for overconsumption.

Fashion in the context of materiality exemplifies how symbolic meaning can attenuate responsible care taking of possessions. McNeill and Moore (2015) suggest that the consumption experience must involve an understanding of a garment’s origin. This shall create a new relationship between consumer and object in order to promote valuation and mindful consumption practices. It is of interest to consider if mindfulness with regard to sustainable clothing consumption can mitigate the need for novelty and antagonise social anxiety by “escap[ing] the cyclical loop of desire and disappointment” (Chapman 2015, p. 78).

$^5$ Empathy can be understood as “the action of understanding, […] being sensitive to, and vicariously experiencing the feelings, thoughts and experience of another […]” (Merriam-Webster Dictionary 2019).
In order to gain a new control over the pace the current fashion cycle imposes on the consumer (McNeill and Moore 2015; CO 2019), strategies for a new form of clothing consumption have been established that shall facilitate the concept of sustainable clothing consumption in favour of the environment. Figure 3 visualises a Sustainable Clothing Consumption Strategy (hereafter SCCS) circular-transition-complex interrelated by the dotted line. From the outer shell to the core, the author verified the least sustainable to the most sustainable clothing consumption approach. The alignment has been chosen intentionally, where each layer represents meaningful actions related to collective norms (i.e. recycling) and individual values (rethinking).

2.3.1 Recycle

When it comes to certain kinds of household waste, Swedish citizens have been more or less successfully socialised to recycling schemes. In the prospects of textiles and clothing, however, the adoption of large-scale recycling practices is still missing (Ekström 2015b). According to the Swedish Research Institute RISE (2019), approximately 8 kg of clothing are thrown away by the Swedish consumer every year. Moreover, Chapman (2015) mentions the problem of failing economic systems, where goods entering recycling and sorting centres still end up in stockpiles since sufficient textile recycling technologies are still in the development process. Therefore, textile waste is an underutilised resource of the fashion industry, while either being downcycled or incinerated. In addition to this, Thorpe (2015) refers to a ‘rebound effect’ (Sorrell 2007) that occurs for consumers that feel entitled to consume more of other resources if they recycle. Hence, recycling can be another way to justify more material consumption with a better consciousness (Catlin and Wang 2013).
2.3.2 Reuse

While clothing recycling is promoted as a sustainable and yet rare consumption practice, the vast usage of energy and other resources needed to actually recycle is often left unmentioned. This is why the reusing of clothing appears as a sustainable practice gaining in popularity. Entitled as ‘sharing consumerism’ (Grigoras 2017), it meets the desire for novelty by extending the ownership of clothing, often with a unique character. Business concepts such as secondhand, vintage and clothes rental/leasing are of interest. Specific secondhands, such as Emmaus, Erikshjälpen and Myrorna from Sweden, are owned by charity programmes that donate their revenue to goodwill projects. Grimstad Klapp and Laitala (2015) indicate that the “reuse through organisations […] gives more than five times higher CO2 equivalent savings compared with material recycling” (p. 127). Clothes swap events and flea markets additionally foster a sharing community that increases a collective collaboration for clothing revaluation. Knowing the previous owner of a garment can further enhance an emotional connectedness between the new owner and his newly acquired fashion item. The process of reusing clothes serves the desire of a fashionable lifestyle and yet makes use of the already existing (Luckins 2010).

2.3.3 Repair

With consumption practices reaching beyond the purchase and disposal of goods, a significant impact happens in between that is during the actual time of usage (Álvarez-Suárez et al. 2013). To maintain a garment means to care for it properly, reading and following care labels and their recommended laundry proposals cautiously. It is of advantage to possess basic sewing skills, for instance, to attach a button or to mend holes. Nowadays, however, this dexterity is not necessarily a part of the average consumer’s knowledge repertoire anymore (Grimstad Klapp and Laitala 2015). The act out of convenience is supported by the cheap clothing provided by fast fashion brands. Therefore, it is of importance to create a relationship between consumers and their clothing which makes them care more about the lasting of their possessions. This either lays in the hand of brands and the values they promote; as well as it lays in the hands of consumers, to appreciate and preserve garments’ true materiality (Clark 2008).

2.3.4 Reduce

Reducing consumption approaches the core of actions, i.e. the way a consumer makes decisions and the parameters on which those decisions are based. The decision to buy less clothing therefore means freeing oneself from social pressure. It also signifies that already possessions can be good enough to serve one’s identity, to fulfil material and non-material needs. On the other hand, to choose well is another factor that mitigates mass consumption. By investing into quality, it ensures a better material durability and ethically correct manufacturing processes. Nevertheless, Isenhour (2010b) mentions the term ‘green consumerism’ which might risk similar effects as recycling through resulting self-rewarding consumption practices. Guckian et al. (2017) explain the problems of green consumerism as the climb in collective consumption rates since better technology and resource efficient production processes still exhaust the planet’s finite nature. In contrast, they suggest individual behaviour change as ‘green citizens’ to foster positive social transformations.
‘Hallå Konsument’ is a nationwide information service coordinated by the Swedish Consumer Agency (hereafter SCA) that provides general facts about buying goods and services and how to shop more sustainably (SCA 2019). The platform offers consumers the possibility to research on ecolabels and their meaning and gives further insights into the world of textiles and their sustainable alternatives.

2.3.5 Rethink

Eventually, the core is reached that especially considers the already existing wardrobe as one that satisfies and secures the own existence. As soon as the consumer crosses the stage where a) (s)he cultivates a relationship to what (s)he already owns and b) uses his or her creative mind to mix and match new outfits to fit the desire for novelty, the restlessness deriving from traditional fashion marketing is moderated. The private reuse maintains the greatest environmental savings (Farrant et al. 2010; Fisher et al. 2011), exemplified by Roloff (2017) who claims that extending garments’ lives twice the time than they are normally worn already reduces CO2 emissions by 24%. Rethinking resembles mindfulness the owner cultivates to show respect for his or her clothes (Stanszus et al. 2017). A short lifespan is the result of the belief in fast fashion cycles which in order to become sustainable have to be reinvented from within. According to Wilson (1985) “in modern Western societies no clothes are outside fashion” (p. 3) which is another way to describe that after all, fashion in its dynamic nature is based on the wearer’s belief in what it actually means to be ‘in fashion’.

2.4 Teaching Methods

In the late 18th century, Immanuel Kant coined the phrase of the Enlightenment which in its essence declares that “humans, through education and applying reason, can distinguish between good and evil, and right and wrong” (Sandell et al. 2005, p. 99). The Latin assertion ‘Sapere aude’, translated as ‘Have the courage to apply your own understanding’, is the main ethic for such a learning empowerment (Smith n.d.). The notion of knowledge is complex and multi-layered and is based on experiences and the way individuals perceive the world with a common social agreement (Berglund et al. 2014). Through teaching, learners can acquire the capacities to question prevalent phenomena, reconsider opinions and critically reflect on circumstances moved by external influencing factors and intrinsic values (i.e. consumption behaviour) (Mogensen and Schnack 2010). The wealth of knowledge ideally creates confidence and an understanding of intricate issues complemented by the wisdom to synthesise knowledge to own experiences and actions.

The role of teachers in times of environmental uncertainty and social turmoil, is to utilise the impact they have on the way students interpret and comprehend complex and confusing matter. Classrooms function as significant learning environments where “a synergy of theoretical notions and practical experiences” (Lijmbach et al. 2002, p. 122) promotes the interlinkage of global issues in a local context (Álvarez-Suárez et al. 2013). Through social media and other channels, students are exposed to an overwhelming amount of information. They feel and know
that the world is in a critical condition, and that it is upon current intergenerational activism to preserve an intact planet (Persson et al. 2011). Hence, it is meaningful how teachers implement the previously described traces of ESD and ESC in their education approach to address students in their own power for SCC and motivate optimism.

Thereby, the transfer of knowledge shall enable a holistic perspective that supports embracing individual epistemologies to tackle a collective change. In the lens of clothing consumption, teachers provide a triggering impulse to encourage action-taking (using one’s own understanding) in order to a) counteract social pressures that promote consumerism (Álvarez-Suárez et al. 2013) and b) facilitate a responsibility learning with overarching effects on the multidimensionality of SD. Borg et al. (2012) mention in their studies specific obstacles experienced by teachers to include SD as an amendment to education and SCC, such as lack of inspiring examples, lack of necessary expertise, lack of time to implement changes in a course, lack of sufficient support from the school management and some teachers did not see the connection within their subject.

Teachers at upper secondary schools are experts in their field with which they can contribute to ESD by communicating their interests through their subject (Sund and Wickman 2008; Borg et al. 2012). Sandell et al. (2005) distinguished three teaching methods that can be related to ESD in a Swedish context, that are fact-based, normative and pluralistic. The following subchapters will briefly explain each of the methods in order to discover potential disciplinary boundaries to be crossed for an education on sustainable clothing consumption (hereafter ESCC). Eventually, new pedagogical strategies on transdisciplinarity emerge as conjoining threads.

2.4.1 Fact-Based
The fact-based teaching method is prominently utilised within science education. Teachers making use of this tradition perceive environmental issues as knowledge problems which is why scientific facts function as reliable and objective source to fill this gap (Hasslöf 2015). It is proclaimed as teacher-centred with the assumption that if teachers forward their students scientific facts, they will automatically change their actions (Borg et al. 2012). Excursions and field trips shall enhance scientific knowledge with first-hand experiences and are mostly related to ecology. Sund and Wickman (2008) mention the “pedagogic task to teach students ‘right’ and true knowledge” (p. 148, emphasis in original) that is facilitated by the fact-based tradition.

2.4.2 Normative
The normative approach is one that seeks to guide a society into a more environmentally-friendly direction by focusing on the values of lifestyles and resulting consequences. Next to scientific facts, emotional aspects play a role that are discussed in active learning situations such as group work. Policy documents and syllabi that are generated by politicians and experts are incorporated by schools in their education (Borg et al. 2012). As a student-centred method, Sund and Wickman (2008) declare that similar to the fact-based concept, sufficient knowledge
will create values that strengthen ecological concerns in behaviour, where problems get solved in groups with scientific facts as information base.

2.4.3 Pluralistic

The third method comprises multifarious perspectives as the word ‘pluralistic’ tells in its essence. Most significant about this teaching method is that apart from teaching factual knowledge, it rather focuses on how to critically reflect on environmental issues in order to “develop collective perspectives that transcend individual behaviour” (Lijmbach et al. 2002, p. 121). Grice (2017) further emphasise the necessity to cross disciplinary boundaries (i.e. transdisciplinary) to strike the modern complexity of global uncertainty. In that sense, the role of teachers is not only that of an expert but one that clarifies the relevance of students’ real life problems and the creation and discussion of questions around detected needs (Sund and Wickman 2008). This method has been proven as most suitable to ESD “put forward as a means for handling ‘competing visions of the truth’” (Hasslöf 2015, p. 27, emphasis in original) in the lens of problem solving and considering conflicting views on SD (Sandell et al. 2005; Öhman 2006).

2.5 Summary of Framework

The following chapter aims to create a synergy of the previously learned concepts with regard to the introductory chapter. The acquired understanding constitutes the foundation for the empirical investigation in later events.

The multidimensionality of ESD requires a contextualisation and ideally facilitates a consensus between responsible actors. Hasslöf (2015, p. 27) distinguishes the perspectives of SD between:

1) social-environmental-economic-cultural
2) past-present-future
3) local-global and
4) individual-collective

Whereas ESD aims to embrace each of the given perspectives, it is yet of question if it acts as a content to learn or if it accounts for a desired learning process (ibid.). Hence, it is significant to understand teachers in their teaching methods that commonly derive by the subjects they are trained in. In between the mentioned teaching methods, the risk of being stuck in one particular approach can be a barrier to implement ESD sufficiently (Borg et al. 2012). This revelation is another indicator to find new ways of learning and teaching that also encourages teachers to continuously grow in their proficiency. Borg et al. (2012) suggest to understand the multiple needs of teachers from different disciplines in order for them to step outside the framework of their own expertise. Moreover, they promote a transdisciplinary teacher training that in its core content bridges the different spheres of SD and ESD sufficiently since up until now, many teachers report a feeling of under-preparedness to teach controversial issues properly.
An accessible connection point between the individual and collective environmental impact is provided by the education on SCC. It addresses students’ realities authentically and empowers teachers to curate threads between individual behaviour, social expectations and environmental consequences. The vicious consumption cycle, as it has also been stated in the very first chapters, finds an opponent in the developed framework of SCC strategies. It is worth to mention that each SCC practice should be individually chosen in order to suit best to own values and possibilities in terms of accessibility. Thereby, ESD and ESC act as a complement to develop beneficial values and attitudes towards SCC. Here again, there is no concrete ‘right’ or ‘wrong’ to be induced on the student as it is upon the acquired student enlightenment to apply reason. With Gen Z as the leaders of tomorrow, teachers can create meaning on how students challenge existing norms and carry new values with confidence into the future.

Summing up, Table 2 will display the most prominent key terms that appear relevant for the concepts discussed in the framework. This further supports the aggregation of the data collection and analysis of the study which will be explained in the next chapter.

<table>
<thead>
<tr>
<th>Concept</th>
<th>Key Terms</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>ESD</strong></td>
<td>Education, sustainable development, multidimensionality, context (economy, society, environment, culture), critical reflection, holistic thinking, uncertainty, mindfulness</td>
<td>“…to preserve the universal responsibility of sustainability and simultaneously address local issues.”</td>
</tr>
<tr>
<td><strong>ESC</strong></td>
<td>Everyday life, education, individual decisions, social norms, responsibility learning, needs and desires, economic systems, freedom of choice, values and emotions, sustainable consumption</td>
<td>“… to promote a moral commitment that eventually results in social responsibility concomitantly in favour of the environment.”</td>
</tr>
<tr>
<td><strong>SCC</strong></td>
<td>Material and symbolic meaning, lifestyles, environment, human empathy, emotional needs, physical goods, relationships, social anxiety, pace, recycling, reuse, repair, reduce, rethink, sustainable clothing consumption</td>
<td>“… to gain a new control over the pace the current fashion cycle imposes on the consumer.”</td>
</tr>
<tr>
<td><strong>Teaching Methods</strong></td>
<td>Enlightenment, learning empowerment, knowledge, wisdom, intrinsic vs. external, confidence, action-taking, fact-based, normative, pluralistic, interests, transdisciplinary</td>
<td>“… to enable a holistic perspective that supports embracing individual epistemologies to tackle a collective change.”</td>
</tr>
</tbody>
</table>
3 Methodology

The description of the method used for the investigation at hand shall enable experienced scholars to replicate the study to given extents. It further facilitates the understanding of the author’s motivation of her chosen research approach.

3.1 Design

The research design of the study is based on the triangle of knowledge (Figure 4) with a constructivist (ontological) respectively interpretive (epistemological) paradigm that declares the truth as a social construction, meaning there is no single reality. In other words, the first chapter comprises the ontological approach to the study of being, revealing diverse settings that are crucial for the reader to gain a desired perspective on the investigation. The second chapter presents the basis of the epistemological view of the author by revealing concepts and theories to discover underlying meanings of events and phenomena, hence it interprets reality. This will eventually lead to the methodology in order to approach and test the knowledge and even extent revelations through collecting data (Bryman and Bell 2015).

![The triangle of knowledge. (Illustration made by author)](image)

3.2 Qualitative Research

The fundamental characteristic of this thesis is the qualitative research approach which focuses on the meaning of words rather than numbers. The qualitative interviews act as a medium to understand the content teachers attribute to their social world. Thereby, the author was able to bring a specific focus, namely sustainable clothing consumption, to the diversity and complexity of individual world views.

Within qualitative research, it is important to mention that the gathered results cannot be standardised or generalised (Saunders et al. 2009). This relies on the fact that the prevailing circumstances of interviews uphold an influential factor on how interviewees respond, as well as on how the interviewer asks his or her questions. Referring back to the interpretivist paradigm, the subjective meanings held by teachers are situated in a constant momentum of
change. Accordingly, world views fluctuate in the context of time and space which is another indicator for the difficulty of replication. The research process is described as thoroughly as possible in order for other scholars to potentially follow the pattern. The specification of procedures contributes to a transparency of a study which enhances the trustworthiness of results (Bryman and Bell 2015). Yet again, even though the author is asked to maintain a neutral attitude to the respondents and the research process itself, she is not completely freed from the natural instinct to construct her own reality. As suggested by Hesse-Biber (2006) practicing reflexivity throughout the research process was essential to support the author’s mindfulness of her personal position and that of the respondents.

3.3 Data Collection

Data can be distinguished between primary and secondary sources. In this study, primary data is represented by the qualitative interviews held with teachers from upper secondary schools in Borås and Ulricehamn, Sweden as a first-hand experience. Secondary data relies on literature, scientific reports and the framework itself in order to find potential variables of investigation (O’Reilly and Kiyimba 2015).

3.3.1 Secondary Data Collection

Before collecting the data, the author gathered theoretical perspectives on the phenomenon to be studied. This approach is entitled as a theory-guided research dedicated to deductivism, where the general picture (theory) gets elucidated by details (data). As epistemological knowledge, the author decided to create a framework of concepts. According to Blumer (1954) ‘sensitising’ concepts give “a general sense of reference and guidance in approaching empirical instances” (p. 7). While still capturing a theoretical frame, concepts are exploratory in their nature. They comprise ideas and notions about phenomena that are combined in their particulars as a construct. For this purpose, concepts that are specialised to the field of education, sustainable development and consumption, sustainable clothing consumption and teaching methods were taken into account. Each of the concepts embraces a certain kind of flexibility and freedom of interpretation in order to address the complexities of sustainability thoroughly.

It is often the case that after a conceptual framework has been built up, the collection of primary data either approves of the gathered knowledge, extends it or even contradicts it. Also in case of no additional revelations, both primary and secondary data are conjoined side players that in their existence first find accuracy when brought together (Bryman and Bell 2015).

3.3.2 Primary Data Collection

The study at hand used qualitative, in-depth interviews with the aim to gain focused information on the field of investigation. Through the comprehension of teachers’ experiences, the research ought to explore ways to support the respondents in the education on sustainable clothing consumption. For this, it is of relevance to gain an understanding of how teachers view the issue of SD with regard to education, clothing as well as sustainable clothing consumption in the daily school life.

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Next to an in-depth approach, the author created a semi-structured interview guideline (s. Appendix) in reliance to the previously generated research questions. The characteristics of this kind of interview is the flexibility and open structure that enables a natural flow of conversation. Hereby, it is worthwhile to mention that the questions do not need to follow the guideline chronologically as long as they are covered by the end of the talk (Bryman and Bell 2015).

Prior to each interview, the author printed the interview guideline with enough space in between questions. Instead of transcribing records, she decided to take notes from the respondents’ answers during the interview that she aligned to the corresponding question. The major advantage of this technique is that it saves transcription time. Furthermore, the author observed that while taking notes the respondents seized the moment of pause to reflect on the question again and often came up with further insights. The interviewees were thoroughly introduced to the process and the author let the participants decide to either go through the notes right after the interview or to send a transcript of the notes in order for them to clarify or make comments to what has been said if needed. Also as part of this research process, a pilot interview was conducted in order to prove if questions are easily understandable and make sense in their alignment in favour of the interviewee, but also the interviewer. The question dedicated to the utilised teaching methods fact-based, normative and pluralistic was previously defined to the interviewees to enable them to identify their own way of teaching

The setting of each interview took either place in the respondent’s school or was conducted via telephone respectively FaceTime. The relationship between the researcher and the researched was of a respectful, non-hierarchical nature. The on-eye level facilitated the flexibility to convey meaning “through the nuances of speech” (DeVault and Gross 2012, p. 206), whereas face-to-face conversations were supported by gesture and expression.

3.3.3 Sampling

The author contacted principals, programme coordinators and teachers of different subjects (i.e. biology, science, design and languages) of preparatory upper secondary schools from Borås and Ulricehamn via e-mail. A description of the study including its purpose and interview outline as well as estimated duration of about 45 minutes was described in the content. The interviewees were also informed that the interview will be kept anonymously and confidential. Due to the scope of the study, the author had a time frame in which she conducted interviews to sufficiently synontise data collection, decoding, and analysis. Within this frame, 9 teachers had the capacity to participate in the interview. It was important to the author to capture diverse perspectives on the topic being examined. Therefore, a heterogenous population of teachers was one of the key stratifiers to facilitate an in-depth understanding of the investigation (Dworkin 2012). In this regard, teachers from diverse fields of study as previously mentioned were essential to this research’s sample. According to Dworkin (2012) there is no fixed sample size for a qualitative study to thrive in its informative richness. For the scope of this study, the amount of 9 interviews saturated and supported the exploration adequately (Charmaz 2006).
Table 3 will provide a synopsis of the teachers’ age, subject and the setting where the interview was eventually held. The purpose of this overview is not to create a statistic scheme, but rather to create a better picture for the reader to relate to in later events. In order to be ethically sensitive, the respondents are assigned to teacher digits (hereafter TD) that will come up during the analysis process. Names of corresponding schools will not be revealed either, to avoid suspicion and false linkages.

Table 3 Overview of interviewees with assigned teacher digits (TD).

<table>
<thead>
<tr>
<th>Teacher Digit (TD)</th>
<th>Age</th>
<th>Subjects</th>
<th>Setting</th>
</tr>
</thead>
<tbody>
<tr>
<td>[1]</td>
<td>39</td>
<td>Nature Science, Biology, Chemistry</td>
<td>Phone</td>
</tr>
<tr>
<td>[3]</td>
<td>43</td>
<td>Biology, Mathematics, Leadership</td>
<td>FaceTime</td>
</tr>
<tr>
<td>[4]</td>
<td>28</td>
<td>English, History</td>
<td>Phone</td>
</tr>
<tr>
<td>[8]</td>
<td>49</td>
<td>Swedish, German</td>
<td>School</td>
</tr>
<tr>
<td>[9]</td>
<td>45</td>
<td>Art, Design</td>
<td>School</td>
</tr>
</tbody>
</table>

3.4 Data Analysis

In order to facilitate the analysis of acquired empirical data, the transitional process of coding was used as the first step to the interpretive act (Basit 2003). The sphere of coding is individually customised and Sipe and Ghiso (2004) denote it as a ‘judgmental call’ bringing subjectivities and belief systems to the process. Therefore, there is no universal formula available which requires the author to create own reason behind her chosen coding technique (Saldaña 2013). However, it is of value for the researcher to become acquainted with the complexity of coding to understand how collected data can be summarised and condensed, but not reduced. For this, categories function as codes to be assessed with meaning that are eventually deciphered by aligning matching data excerpts. It should be mentioned that coding possibly extrapolates from context since excerpts are taken as fragments (Bryman and Bell 2015). With this in mind, it is in the author’s responsibility to analyse the codes plausibly with respect to her study’s initial expertise.

3.4.1 Finding of Coding Categories

After the data collection has been finalised, the author decided to utilise categories that shall facilitate her decoding technique. Chapter 2.5 (Summary of Framework) contains a table with relevant key words that repetitively appeared throughout the framework of concepts, i.e. Chapter 2. A thorough examination of the interviews enabled the author to trace results to the key words available.
Within those key words, eight terms appeared as especially matching to the respondents’ answers. Therefore, repeated evidence can be found to the following coding categories:

1) Sustainable Development
2) Teaching and Transdisciplinarity
3) Sustainable Clothing Consumption
4) Lifestyles
5) Social Anxiety
6) Overconsumption
7) Mindfulness
8) Teaching Materials for SCC

### 3.4.2 Definitions of Coding Categories

In Table 4, each category was defined according to the secondary data mentioned earlier. For this purpose, direct quotations from the literature were listed in quotation marks, while comments by the author summarising sources are listed without quotation marks. The clarification of terms shall enable the reader to relate to the previously acquired knowledge and to perceive and trace the subsequent analysis in the author’s point of view.

<table>
<thead>
<tr>
<th>Category</th>
<th>Definition</th>
<th>Reference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sustainable Development</td>
<td>..as the competence of contextualisation and critical reflection aligned with a pluralistic worldview that supports social progress within biophysical limits.</td>
<td>By author, inspired by: Sund and Öhman (2011)</td>
</tr>
<tr>
<td>Teaching and Transdisciplinarity</td>
<td>..as a tool to share knowledge and to encourage individual learning processes. ..as “the emergence of a new discipline transcending the boundaries of disciplinary perspective.”</td>
<td>By author, inspired by: Sandell et al. (2005) Ramchandani (2017)</td>
</tr>
<tr>
<td>Sustainable Clothing Consumption</td>
<td>..as a conscious approach in differentiating genuine needs from those induced by profit-driven marketing strategies and social anxiety in order to refine environmental awareness through clothing.</td>
<td>By author, inspired by: McNeill and Moore (2015)</td>
</tr>
<tr>
<td>Lifestyles</td>
<td>..as the way human beings create meaning through their individual, daily choices.</td>
<td>By author, inspired by: Fletcher (2008)</td>
</tr>
<tr>
<td>Social Anxiety</td>
<td>..as “[t]he striving for position or belonging through [fashion] goods.”</td>
<td>Thorpe (2015, p. 70)</td>
</tr>
</tbody>
</table>

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Overconsumption
..as the underutilisation of garments driven by social desirability, social norms and fast fashion cycles that through cheap prices turn garments into single-use purchases.
Synonym to: excessive consumption

Mindfulness
..as “the reflection of individual values and actions [...] therewith potentially strengthen people’s ability to deliberatively focus their mind [...] [to] become more sensitive for their own values and actions, emotions and ensuing actions.”

Teaching Materials for SCC
..as the support teachers from upper secondary schools delineate as important to educate on sustainable clothing consumption to approach SD with more confidence.

3.5 Validity and Reliability

Qualitative research is due to its interpretive and subjective data generation critically inspected since the findings should be believable and consistent. The validity of a qualitative research approach is concerned with internal and external determinants. The internal validity acts as a measure of accuracy of the investigation and declares the richness of data collected. It identifies how strong the research method is in order to eliminate other alternatives to explain gathered results (Bryman and Bell 2015). The internal validity of this study is perceived as highly accurate since the main target, namely teachers, has been captured as a focus throughout the research process. While being set in educational context, the dimension of sustainable clothing consumption has consistently been put into relation. In order to ensure the internal validity, the author considered the authenticity of a reflexive stand point being aware of the researcher-researched respectful relationship.

The external validity amplifies how a study’s outcome can be generalised and transferred to another, similar context (Cuncic 2019). In this case, the external validity is ranked as rather low due to the subjectivity of perceptions. However, the prevalence of sustainable clothing consumption and education certainly leaves room for other contexts and stimuli to be applied which is another typical feature of a qualitative study.

In terms of reliability, with an accepted margin of variability the aspect of consistency is of major value (Leung 2015). The consistency relies in a refutational analysis that strongly includes a critical reflection on analysed matter. This further supports the comparison of
sources, whereas a traceable data generation is of necessity. The reliability of this study is perceived as high due to its endeavour of conducting the research transparently while explaining motivations for choices and revelations. The inclusion of quantitative aspects as it can be found in the introduction, for instance, conjoins numeric facts with words as substantive focus that further enhances the reliability of the investigation (Silverman 2009).

4 Results and Analysis

The following chapter provides the reader with a cross-section of primary and secondary evidence that supports the explanation on the effects of research findings. With thoroughness and brevity, the author depicts results as concomitant of already existing knowledge. The teacher digits used in the coding will be taken as reference points for the analysis to support disclosures.

4.1 Summarised Research Results

The following Table 5 comprises the previously mentioned categories and complies with a combination of results of all the statements gathered throughout the interviews. While covering the most prominent insights of each category, the overview provides the design and layout for the reader to trace back the decoding process. The complete data collection and categorical allocation can be found in the Appendix II. It is worthwhile to mention that teacher digits (TD) as mentioned in the sampling chapter (Table 3) have been used to allocate the individual statements to corresponding categories. In the subsequent analysis of each category, the reader will notice numbers in square brackets (e.g. [2]) that resemble the TDs and refer back to teachers supporting or arguing against a given disclosure.
Table 5 Overview of decoding outcome (s. Appendix II for detailed insight).

<table>
<thead>
<tr>
<th>TD</th>
<th>Sustainable Development</th>
<th>Teaching and Transdisciplinarity</th>
<th>Sustainable Clothing Consumption</th>
<th>Lifestyles</th>
<th>Social Anxiety</th>
<th>Over-consumption</th>
<th>Mindfulness</th>
<th>Teaching Materials for SCC</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>• context</td>
<td>• fact-based: beliefs combined with facts for true knowledge</td>
<td>• clothing as central part of teenagers’ world</td>
<td>• ecological footprint</td>
<td>• peer/social pressure</td>
<td>• available bargains</td>
<td>• critical reflection</td>
<td>• time for additional education</td>
</tr>
<tr>
<td></td>
<td>• future generations</td>
<td>• interactive learning environments (e.g. group work, discussions, speech, excursions)</td>
<td>• from a lot to less things</td>
<td>• individual choices</td>
<td>• group belonging</td>
<td>• changing trends</td>
<td>• reconstruct way of thinking</td>
<td>• short movies</td>
</tr>
<tr>
<td></td>
<td>• complex</td>
<td>• subject dependent easy/less easy implementation of sustainability</td>
<td>• wardrobe with basic items</td>
<td>• without first-hand consequences, hard to change behaviour</td>
<td>• attempt to impress</td>
<td>• since 1980s/90s: more money, more demand for happiness through materiality</td>
<td>• identity creation</td>
<td>• internet</td>
</tr>
<tr>
<td></td>
<td>• no existing consensus in school life</td>
<td>• interdisciplinary collaboration having common goal</td>
<td>• knowledge about material origin</td>
<td>• from change to habit</td>
<td>• influenced by media</td>
<td>• cheap goods thrown away easily</td>
<td>• students growing, becoming stronger in their hearts</td>
<td>• ready-made teaching plan/guideline</td>
</tr>
<tr>
<td></td>
<td>• very loosely/vaguely included in teaching guidelines</td>
<td>• non-judgemental, student-centred</td>
<td>• trend</td>
<td>• cognitive dissonance</td>
<td>• search for happiness through clothing</td>
<td>• self-rewarding through recycling</td>
<td>• not what they wear but how and who they are</td>
<td>• foundational courses</td>
</tr>
<tr>
<td></td>
<td>• school certification not sufficient in communication</td>
<td>• new way of consumption: sharing</td>
<td>• availability</td>
<td>• better alternatives without compromising on happiness</td>
<td>• social identity clothing industry inducing false ideals</td>
<td>• visual stimuli in shops</td>
<td>• risk for rebound effect</td>
<td>• collaboration with university</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• risk of green consumerism</td>
<td>• societal support</td>
<td>• from change to habit</td>
<td></td>
<td>• moral ground in personality</td>
<td>• student to youth: change of learning experience</td>
<td>• youth to youth: change of learning experience</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• new way of consumption: sharing</td>
<td></td>
<td></td>
<td></td>
<td>• awareness of own values</td>
<td></td>
<td>• Skolverket: compendium, proper material for students to read and study; nationwide introduction; inspirational material</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>• more caring attitudes and inner qualities</td>
<td></td>
<td>• easy knowledge access</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>• consciousness: grounded in being than only thinking stabilising identities</td>
<td></td>
<td>• experts: how as teacher to increase impact on students</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>• sharing ideas: teacher platform</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>• diverse media (magazines, radio, TV, social media)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>• workshops together with students</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>• sensitive to subjects</td>
</tr>
</tbody>
</table>
4.2 Sustainable Development

Throughout the research, it has become apparent that the multidimensionality of SD poses difficulties on how to understand the concept evenly. Therefore, it is of value to refer sustainability issues in context of the commonly known areas of the economy, the society and culture, and the environment. However, also a contextualisation is influenced by prevailing world views which likely contributes to a conflict of interest and, hence, reduces the chances of finding a consensus. This can be also detected in schools aiming to include SD in their educational approach, whereas the majority of the interviewees clearly indicate that SD is not prioritised in the school culture ([1];[2];[3];[4];[6];[8];[9]). The respondents further criticise governmental guidelines as in curriculum and syllabus that in their content are quite narrow but only vaguely describe what is supposed to be taught on SD and also how ([1];[3];[4];[5];[6]).

With regards to eco-certifications like the Green Flag, the interviewees either missed a proper communication within the school, associated policies but especially to suit actions to words ([4];[6];[8];[9]). Here, they exemplified recycling schemes that whereas in a Swedish household are of common sense are only sparsely complied within the school culture ([3];[8]). On the other hand, food choices in canteens are more and more aligned to a vegetarian diet which, however, has been associated to economic benefits as motivational indicator [4].

The complexity of SD makes it somewhat hard to concretely declare ‘right’ solutions. Albeit, the Agenda 2030 in forms of the 17 SDGs provides indicators of orientation and clearly states the relevance of today’s practices in the lens of long-term thinking. However, only one teacher specifically leaned on such very goals as guidance [1]. Accordingly, the majority of teachers interviewed showed acknowledgements to the responsibility and commitment on SD, but were not certain how to incorporate them into their teaching methods properly ([1];[3];[8]).

4.3 Teaching and Transdisciplinarity

The distinction of teaching methods that are prevalent in the Swedish education systems, as in fact-based, normative and pluralistic, opened up insights into teachers and their way of thinking. It is of interest how knowledge is best communicated to students, especially when it comes to addressing a web of complex issues such as SD and SCC ([3];[6];[7]).

Most of the respondents identified themselves with the fact-based method, whereas it matters to them that beliefs and opinions are strengthened through evidence to transfer true knowledge ([1];[3];[8];[9]). Even though this approach is entitled as being teacher-centred, many explanations of classroom dynamics revealed a student-centred mentality. The learning environments were mostly described as interactive on the examples of discussions, group work, speech holding and excursions including reflective questioning in courses ([1];[2];[3];[5];[7]). Within such communicative process, a non-judgemental attitude from teacher to student was mentioned, where teachers intentionally do not want to suggest morals on students to follow
Instead, they hope that through knowledge acquisition, students will develop own morals in favour of SD which is another characteristic of normative teaching.

The interdisciplinary exchange of best practice between teachers integrates knowledge and teaching methods as a synthesis of approaches ([3];[5]). Some teachers with subjects outside of nature science and ecology, such as language, perceive difficulties in finding connections to SD and SCC in particular [8]. Nevertheless, they maintain a great decision power in literature and lesson material for contemporary topics. Teachers of mathematics were either positive about the way they can implement SD, or only saw chances of talking about related issues besides the discipline taking place ([2];[3]). The connection to SCC seemed rather far-fetched and less likely to be considered. The concept of pluralistic teaching has been seldomly identified as a teaching method, even though the idea of involving different perspectives and values was partially already included and motivated by the contextualisation of SD.

4.4 Sustainable Clothing Consumption

Most teachers described the relationship between clothing and sustainable consumption as the durability and magnitude of clothing in private use ([2];[3];[4];[8]). A few also spoke about the missing but relevant awareness of material origins in terms of production and manufacturing in order to make valuable and more sustainable choices ([4];[9]). Clothing embodies a constructive role of emotions that are symbolically expressed as a surface layer of the wearer. In reliance to sustainability, this superficiality is deemed to be internalised, creating a respectful relationship between emotional spheres and physical appearances. This is further supported by the respondents who emphasise group belonging without the necessity to follow trends ([1];[2]). The notion of human empathy is hereby significant in order to understand fundamental human needs and the importance of fashion as a way to compensate a natural state of uncertainty. Therefore, SCC seeks to decelerate the pace of current fashion cycles that within the strategies clearly enhance a revaluation and consciousness about materiality, possessions and the genuity of needs ([2];[3]). It was further stated that SCC as in secondhand may not be a dominant trend yet, but that this might change in the future which would simplify a sustainable decision-making for students ([4];[5]).

With this in mind, several teachers talked about the investment into goods of quality and desire that will last longer and that will constantly stay in fashion ([1];[3]). Furthermore, reinventing wardrobes and the functionality of clothing pieces facilitates the life extension of garments [8]. New ways of consumption were suggested that are exemplified in the dimension of ownership as in sharing or exchanging events taking place in schools ([7];[9]). In terms of availability, some interviewees criticised that sustainable clothing is not as easily accessible as conventional fast fashion goods ([1];[4]). On the other hand, sustainable clothing that is marketed also poses the risk of the previously described green consumerism that only stirs more consumption with a better consciousness [6]. Hence, sustainable clothing consumption is supposed to affect intrinsic, authentic values, as well as cognitive reasoning (i.e. enlightenment) ([1];[9]).
4.5 Lifestyles

As stated by multiple teachers, consumption practices are apparently strongly reliant on lifestyle choices and habits ([1];[2];[3];[5];[7];[8];[9]). One teacher mentioned the connection to ecological footprints that are constituted by individual choices affecting the environment on a bigger scale [1]. However, up until now, a lot of consequences are not experienced by those that primarily contribute to environmental breakdown and human contempt. This is perceived as a barrier towards changing current behaviour patterns easily and effectively ([1];[4];[5];[7]).

Yet with clothing as a part of the everyday life, it is ubiquitous and graspable in its nature. Further, clothing has been described as a central part of teenagers’ lives ([1];[5]) which provides a flourishing base for education to find themes that not only matter to them, but where they can also create meaning for a common well-being. Accordingly, to teach on SCC can bring closer the awareness that choices, individually and collectively, matter and play a big role in civic progress ([4];[5];[7];[9]).

Several teachers implied that changing behaviours in adolescence and in general often depend on moods and trends. This easily ends up in returning back to old behaviour patterns if it a) has not been manifested in own values and b) if social surroundings relent from change ([3];[7];[8];[9]). This can be referred back to the act of convenience that in order to be commercialised has to become part of sustainable practices. It has been mentioned that students are often not aware of sustainable alternatives that would not compromise on their actual happiness respectively quality of life [5]. Teachers find it relevant that through education students contemplate sustainable clothing consumption alternatives more frequently ([1];[2];[3];[5]). Here, one teacher underlined the necessity of social systems to support sustainable consumption practices with the aim for a social transformation to take place successfully [6].

4.6 Social Anxiety

Glancing back to the conformity culture that is especially cultivated by Swedish citizens, the notion of peer pressure has been repeatedly mentioned by the majority of the respondents ([1];[2];[3];[5];[8]). Driven by social norms and influenced by encompassing social media ([2];[4]), the desire to impress and belong are two key motives of teenagers’ clothing consumption ([4];[9]). Within the creation of their identity, students are subliminally guided by trends and are tempted for novelty. Garments are perceived as the layer of confidence that in confrontation constantly searches for social acceptance [5].

This can be further related to the ideals induced by the clothing industry that are not seldomly hard to reach, but especially undermine the understanding of own morals and values [9]. It was stated that nowadays, the capacity to ‘show-off’ through clothing, in other words, what meets the eye is more relevant than what moves and connects people inwardly ([2];[9]). The described homogeneity is often a concomitant to following trends ([2];[4];[5]). This indicates that clothing in its nature is capable to transform individuals to an unconscious cohort of uniformity.
Moreover, social anxiety is characterised by social capital which has been described as a reason why secondhand clothing, for instance, is only perceived as trendy from those with greater social capital [4]. Disadvantaged students that have no other choice, on the other hand, are less likely recognised as equally trendy. Furthermore, as long as secondhand is not perceived as ‘in fashion’, students are not expected to choose such alternative clothing acquisition [5].

4.7 Overconsumption
During the interviews, it got apparent that the respondents were mostly aware of the wealth they are situated in ([3];[8]). A few pointed out that Swedish households probably acquire and own far more clothes than are actually worn due to its easy availability and the desire to impress ([1];[3];[5];[8]). Some respondents also mention the significance of trends entering market streams that thereby reach consumers as triggering consumption stimuli ([2];[5]). Accordingly, wardrobes are renewed frequently whereas older generations do not feel as much the haste of novelty they assume younger generations experience [2].

Overconsumption finds traces of social anxiety and vice versa since material possessions function as means to gain social position [8]. Furthermore, human identities are situated in a perpetual state of change which is another reason for marketers to use the fragility of emotional instability. Due to the constant desire for novelty and in times of increasing wealth, cheap fashion items are perceived as bargains ([1];[3]). It appears more relevant to be in trend while a low standard of quality is compensated with a convenience of disposal ([1];[2];[3];[8]).

Next to an underutilisation of garments, one respondent suggests the controversies of SCC practices that motivate a rewarding attitude [4]. For instance, the activity of recycling is rewarded with further new garments. Another interviewee emphasised how marketing and PR strategies for eco-friendlier products additionally stir more consumption without considering already possessions [6]. In order to lower excessive consumption, a base wardrobe is perceived as a good alternative to stay in fashion [1].

4.8 Mindfulness
Mindfulness is another way to describe the deliberation of own values and actions that are perceived as important learning objectives for ESC. By focusing on the triggers that eventually lead to human behaviour, core motives can be assessed in their meaning and questioned in their reason. Furthermore, mindfulness is supposed to create more grounded morals in individuals that ideally promote caring and responsible attitudes ([5];[7];[9]). Several respondents suggested the necessity of critical reflection not only to understand consumption behaviours, but also to path a way to identity creation ([1];[2];[4];[7];[9]).

Moreover, a mindful approach towards the intricate web of diverse issues further equips students, as well as teachers, with more room for perspective ([1];[4];[5];[9]). This shall support a learning process to create relationships between the self and the outer world and possibly
encourages to re-examine inherited belief systems, i.e. what is actually needed ([1];[2];[5];[6];[7]). Here, for instance, the typical trend stimulus that is fostered through visual merchandising could be resisted [5]. Some respondents clearly stated that the awareness of own values is important in order to confront external influences and controversies with steadfastness and integrity ([1];[7];[9]). This also includes reconciling individual worldviews with those of a collective and continuously searching for a state of equilibrium of understanding ([4];[6];[9]).

4.9 Teaching Materials for Sustainable Clothing Consumption

One of the most prominent features mentioned throughout the interviews was the relativity of time ([1];[2];[3];[5];[6];[7]). Due to the prescribed subject contents, educational requirements and a vague linkage to SD, most teachers viewed it as critically to implement SCC and SD additionally into their regular teaching approach. A reason for this is the restricted time for lecture planning that also includes extended education on own initiative. The abundance of occurring and relevant topics appears as a factor that likely causes stress amongst SD engaged teachers. Teachers suggest an obligatory time frame that is specifically dedicated to a teacher training on ESD respectively ESC ([1];[6]). This shall function as a derivation from improved school guidelines and philosophies on SD.

According to the respondents, the education on SCC is considered promising since clothing is a general component of consumer practice and thereby of all life ([1];[4]). This facilitates the desire to reach students and their attention by discussing matter that is relevant in their own realities. Moreover, the omnipresence of clothing approximates environmental and social issues by being equally as important for the environment, as for the economy and not the least, for the human being [3].
Even though being aware of clothing as the everyday object, a distinct knowledge about the diverse areas it is connected to is required and has to be made accessible for teachers of various expertise. **Figure 5** will provide an overview of the gathered materials and tools teachers brought up during the interviews that serve this very purpose. The corresponding teacher digits can be found underneath each suggestion.

![Suggestion grid for teacher support on ESCC. (Illustration made by author)](image)

**Figure 5** Suggestion grid for teacher support on ESCC. (Illustration made by author)

With the help of the collected data, the shown figure could be created. As the outcome of the previously shown Table 5, the mapped suggestions of teacher support for the education on sustainable clothing consumption (ESCC) became evident. While reflecting back on the barriers teachers experience towards ESD in general, these revelations appear as promising building blocks in order to overcome the barriers with the help of extra-disciplinary incentives.

The grid contains three focal areas of teachers, teachers and students, and external support to exemplify a multi-stakeholder network. Category one comprises measures and platforms that exclusively support teaching staff in their teaching competence. Category two covers the teaching-learning relationship and how SCC can be learned collaboratively through official frameworks and activating initiatives. The third category offers the opportunity to integrate current topics into the curriculum through unbiased, extracurricular speakers and institutions.

Viewing the grid as a whole, the focal areas are interconnected with each other. The reason for this is the beneficial outcome from one suggestion to the other. As an example, new ways of learning as in youth to youth lectures can be enabled through expert visits or students from surrounding universities. This can be promoted on an online teacher platform, where teachers can share their experience and best practice. The ready-made teaching plan provides a time sensitive guideline for teachers with enough flexibility to take in current matter that recently
happened, possibly locally. This again fosters transdisciplinary teaching and is enhanced through regular updates the Skolverket (Swedish National Agency for Education) or school principal communicates.

Several respondents pronounced the leadership skills of the schools’ principals that possess a meaningful impact on how SD and ESCC can be manifested as a core part of the daily school life ([2];[3];[5];[8]). This is why such leadership needs to be in constant dialogue with the Skolverket in order to exchange first-hand experiences with requirements and develop best practice initiatives together. In general, any chosen suggestion block eventually relates to or affects another as it was described as a multi-stakeholder commitment. The strong connectedness shall motivate and drive cooperation to increase the quality of teaching. The collaborative incentives are ideally sourced at a local level to facilitate a successful implementation.

Moreover, teachers showed a genuine interest in working beyond own proficiencies to also extend their own knowledge repertoires ([1];[4];[5];[8];[9]). In order to tackle comfort zones that are created by the certainty of the already experienced it needs an encouragement of teachers’ willingness of continuous learning. Human progress depends on curiosity which is why learning environments need to be able to incorporate changing societal moods, trends, and innovation naturally.

It is worthwhile to mention that this grid functions as a mediator for teachers to approach ESD through ESCC with more clarity and guidance. However, these tools do not display one concrete solution for sustainability, but rather a chance to approach its very complexity with a collective, problem-solving mindset that includes diverse solutions in the context of circumstances.

5 Discussion

This part of the thesis conjoins the findings to what has already been known about the investigation. It shall verify new insights about the problem considered and ideally, provides thought-provoking impulses to the developed research questions.

5.1 Education on Sustainable Clothing Consumption (ESCC)

The following chapter will examine the first research question: “In which ways can the education on sustainable clothing consumption assist teachers in conjunction with their students to approach environmental challenges with more confidence?” Clothing can be seen as the social force, where logic and responsibility meet emotional reasoning. Moreover, by belonging to the everyday life, clothing’s symbolic meaning maintains a crucial power to revolutionise entrenched belief systems. Fletcher (2008) calls it the “emergence of reflective consciousness freeing […] from cultural determinism” (p. 124) that is enhanced through sustainable clothing consumption. Here, it is worth to mention that ESCCC as part of sustainable development does
not aim for perfection, but for action in human progress that departs from material wealth as industrial driver towards the appreciation of the nature of life.

Accordingly, in order to counteract the severity of overconsumption as a major cause for the climate breakdown, sustainable clothing consumption strategies (SCCS) ought to provide more sustainable alternatives to traditional consumption practices. They further function as potential strategies to thwart the vicious consumption cycle (VCC) without compromising on the joy of clothing respectively a ‘good life’ (Figure 6).

![SCCS Diagram](image)

**Figure 6** Illustration of the SCCS cycle counteracting the VCC. (Illustration made by author)

Within the SCCS cycle, the three areas economy, society, and environment are addressed as key indicators. Whereas this thesis focuses especially on the environmental benefits of sustainable clothing consumption, social and economic advantages resulting from it are as equally important. During the data collection where it was specifically asked to put clothing consumption in relation to sustainability, teachers either revealed their discomfort in the consumer culture or brought up ideas what would motivate sustainable clothing consumption. On this premise, when the private economic status, for instance, is a priority, savings could be achieved through new combinations of existing garments. For this purpose, selective investments in qualitative, reusable goods would determine consumer behaviour and lead to less expenses in the long run. Advertising could be used to provide the necessary inspiration and perhaps smart additions. In effect, this means that through the investment in qualitatively produced clothing and conscious use, fast fashion’s speed can be slowed down. According to Wahnbaeck and Roloff (2017), trends can create a conflict of own realities that are perceived as autonomously generated, whereas the visual representation tells differently. Therefore, consumers not only need to have a respectful attitude towards the materiality and origin of his or her clothing, it also presupposes a personal resistance to social pressures and changing trends.
Apart from that, to reuse can also mean the purchase of secondhand clothing where garments gain a prolonged life by circulating amongst several owners. Moreover, secondhand goods are usually of unique character that resembles and supports consumers’ individual identity creation (Gwilt and Rissanen 2011). An elongated maintenance by making use of the already existing supports not only a circular industry transformation, but also stands for the understanding of resources at scarce and the decoupling of excessive consumption practices (i.e. repairing minor flaws in garments instead of throwing them away). In summary, the last two paragraphs are focused on why it is important to reduce consumption to achieve economic savings; yet are ways to reduce, reuse and repair simultaneously linked to support the addressing of environmental challenges either way.

According to Grice (2017) and Stanszus et al. (2017), the most significant change has to happen in the ‘rethink’ phase that revitalises and emphasises on inner values. In reliance to these values, authentic needs will generate a stronger sensitivity against conventional marketers’ infiltration methods. In an era where information is easily available, a stimulus overload and impulsive actions are often the consequence. For this daily scenario, questioning techniques might help to provide insight into real desires and to differentiate between urgent and purely entertaining desires. These questions should reflect on the intrinsic cause of the desire (e.g. Why do I have this need?) and the extrinsic factors activating it (e.g. What triggers my need?). Taking a moment of thought will enable a comprehensive view on rationales and mitigates impulsive decision-making. The concept of mindfulness conjoins cognitive elements of critical reflection that through empathy and compassion also enter the emotional spheres of human beings (Mogensen and Schnack 2010; Grice 2017; Stanszus et al. 2017). In the prospects of ESC and SCC, the cognitive level engages in affective learning, whereas the emotional dimension complements with notions of meaning-making. This will eventually amplify an openness towards a systemic shift of values. By extending SCC strategies with an intrinsic motive assessment, consumers respectively students are enabled to make more differentiated decisions, supporting individual ways to understand the complexities of SD within their own behaviour and moral norms.

It is worth to mention that sustainable clothing consumption also appears as a paradox in its meaning. The positive feelings that can come from investing into clothing which is ethically and eco-efficient manufactured, actually poses the risk of more consumption as it was entitled as green consumerism (Isenhour 2010b; Guckian et al. 2017). The rewarding stimulation that can occur through SCC practices can therefore drive more consumption (Sorrell 2007). In this regard, the spectrum of consumption as a whole has to be reassessed, where meaning is created through inner qualities. As mentioned in the above, the focus on genuine needs can have a great impact on the acquisition of goods. To comprehend one’s own motives and how needs are generated is a learning process that shall accentuate individual realities in relation to social surroundings (Stanszus et al. 2017). In that context, consumers can consider fashion items in their holistic and fast-paced nature while acknowledging their actual ecological footprint (Fletcher 2008). This leads to the ascertainment that individual consumption behaviours
Significantly matter with regard to their environmental impacts and thus leads to more confidence in the relevance of own decisions.

Especially in the lens of adolescents, it makes sense to also relate to social anxiety as a prominent driver of consumption. The aspiration to impress with clothes implicates motivating forces of belonging. It disregards inner competencies that especially in adolescence are scrutinised in their worthiness. The impact of fashion on the perceived self-worth of an individual has to be critically examined: fashionable articles can express inner qualities and personal characters, however, they cannot replace them. While trying to find ways how sustainable clothing consumption can make environmental challenges more graspable, teachers may also have the chance to stir new values of compassion and care in their students.

In addition to this, the speed of fashion led to the exhaustion of resources with prevailing economic systems not only exploiting consumers in their financial assets, but also in their creativity and self-acceptance. Manual skills are not commonly present anymore, and the required effort to fix broken garments is often perceived as inconvenience. Fashion can be seen as the emotional layer that is wrapped around the constant reciprocity of satisfaction and disappointment. Against a “superficial commodity fetishism” (Grimstad Klapp and Laitala 2015, p. 122), consumers need to find a way back to their true selves, where a bigger concern is laid on emotional wellbeing. A distinct consciousness about material origins, basic skills in mending them and the awareness that one can actually live well with less can decelerate the fast-paced delusion of consuming more than is needed. In the perspective of adolescents, the trend of mindful, sustainable clothing consumption will turn sustainability eventually into fashion.

Last but not least, the multifarious layers that occur when examining psychological phenomena like clothing consumption can be reasonably explored through transdisciplinary teaching capabilities. This can be explained by the necessity of involving diverse perspectives on individual behaviour motives with regards to collective complexities. Tradition, history and social movements are three key determinants constituting cultural norms that in order to be transformed have to be examined in their holistic appearance. A search for solutions is motivated through the understanding of own contributions amplified by clothing. The acknowledgement of own lifestyle decisions and their impact to environmental challenges enhances the confidence in the zeitgeist of change. Moreover, transdisciplinarity is perceived as the catalyst to provide individuals with the competencies and appropriate skills to approach complexities with a language of possibility. This disclosure will be further discussed in the next chapter.
5.2 Transdisciplinary Teaching Approach

Now that the ways in which SCC and collective capacities can support teachers and their students to approach environmental challenges with more confidence, it is of interest to understand what is needed to implement a transdisciplinary teaching approach, and hence promote the education on sustainable clothing consumption. To begin with, in 2015 the UNESCO launched a flagship project under the Action Programme for ESD carrying the title “Sustainability Starts with Teachers” (UNESCO 2015-2019). Another platform called ‘Learning for a Sustainable Future’ created pedagogical resources “to better prepare citizens to address the rising […] challenges of the 21st century” (LSF 2019). A global institute for sustainability from Arizona claims that teachers inspire students and need to provide them the right tools and competence to make a difference (ASU 2019). In other words, teachers are perceived as essential initiators to advocate transformative learning and interlink clothing and consumption with sustainability. With this in mind, this section seeks to answer the second research question: “What is needed to implement a transdisciplinary teaching approach to educate on sustainable clothing consumption?”.

In Swedish upper secondary schools, several courses already deal with consumption in contexts such as energy, transport or food. The area of clothing, however, is not as thoroughly depicted and yet it covers the broad range of environmental, social, cultural and economic issues tangibly. With clothing consumption as a prevalent component of students’ and teachers’ lives, it further offers promising intrusion points for socialising purposes in education. As a common daily activity, teachers and students share experiences that can benefit a compassionate learning environment.

However, next to enthusiasm, also sceptical insights were given during the data collection. Questions aroused whether it is the right age to intervene with sustainable clothing consumption and whether schools have an influential impact on students when it comes to clothing. Yet through the author’s experience of own initiated projects in upper secondary schools on clothing and sustainability, the resulting curiosity amongst students and extensive research convinced of upper secondary schools and their comprehensive spectrum of identity creation, cognitive development and challenging mindsets.

Students at the age of 16-20 are situated in a transitional phase. Stabilising identity creation processes can have major impacts to make students grow as responsible citizens. This identity creation, as it has been mentioned in the first part of this study, is closely linked to the field of clothing. Teachers aided with the right training and materials possess the potential to step into these spheres to fathom behaviour motives, to encourage empathy and, eventually, to motivate an adaptive resilience towards the climate crisis.
The following **Figure 7** will visualise how the generation of knowledge on sustainable clothing consumption can be disseminated amongst teachers to educate students on SCC properly. The figure has been conceptualised by the author and is tailored to this study with Sandell et al. (2005) as source of inspiration.

![Figure 7 Teachers' knowledge acquisition for the implementation of ESCC created by the author, inspired by Sandell et al. (2005). (Illustration made by author)](image)

The **knowledge foundation** on SCC shall create a consistent and general base for teachers to gain expertise in a field that might not have been included in their own proficiency yet. This knowledge relates to environmental and social problems that occur in the clothing industry. A respect for the materiality of garments can foster a new relationship between societies and the natural world. The **theory of knowledge** promotes the understanding of individual learning processes that views conditions from different perspectives. Moreover, it is common to separate between teachers and students as the learned and the learners. Nevertheless, also teachers need to be encouraged for continuous learning. During this phase, key concepts such as mindfulness and critical reflection shall be trained to serve as an overarching medium to internalise new learning experiences. It further provides means to map out thoughts, sensations and emotions to trace and correlate own behaviour patterns that derive from personal and external determinants. Finally, it is significant to apply the theoretical understanding of teaching and learning to **knowledge practice**. By transcending boundaries, diverse disciplines get involved as equally important proficiencies. The assessment of complexities from various perspectives (i.e. pluralistic world views) is facilitated through a transdisciplinary teacher training enhancing teacher skills and confidence on the example of sustainable clothing consumption in order to approach the conundrum of SD.
Figure 8 aligns the previously described grid of suggestions for teacher support on ESCC to the teachers’ knowledge acquisition, whereas the allocated digits 1, 2 and 3 act as a reference.

The combination of both, suggestion grid and teachers’ knowledge acquisition on SCC reveals a) how the layers of gaining expertise in an uncommon field and b) how to communicate it attractively interact in their assessment. Furthermore, the distinction between foundational, theoretical and practical knowledge show where it is important to focus on the nature of learning that with sufficient expertise leads to a desired learning dynamics executed in a classroom. It further supports that different knowledge acquisition characteristics find relevance in combination, where, for instance, the ready-made teaching plan enables teachers to know what to teach and also how to put it into practice. The workshops for teachers and students create a base for SCC and combine innovative ways of teaching and learning either way. This is complemented by the example on youth to youth education to reveal new perspectives on how contemporary topics should be dealt with.

With regard to this, a report on Nordic Best Practices already shows first attempts and tested diverse concepts on ESC and the climate crisis. Denmark, for instance, initialised the ‘Climate Embassy’. In this first run, 100 volunteers in the age of 19-28 years teach students and other stakeholders about sustainability and related climate themes. The youth to youth communication promises an identification young people experience with the climate ambassadors (Hillgrén et al. 2016). The suggested online teacher platform and transdisciplinary teacher training (s. Focus on Teachers) find similarities to the Norwegian ‘Sustainable Backpack’. There, a strong focus is laid on teachers’ professional development. They become part of a learning community where network meetings provide relevant scientific and pedagogical content training with supervision on ESD projects. With further examples, this
report aspires to establish new ways of learning that address diverse mindsets less standardised, but more individualised (Hillgrön et al. 2016).

It has been stated that Gen Z carries a great responsibility for the survival of next generations. This long-term thinking puts the climate crisis to the burden of the future. However, it is today that actions have to take place to transform societies into those that learn again how to live within the capacities of this planet. Teachers are the source to equip this generation with the needed strength to respond to gloomy prospects with confidence and willpower. Throughout the interviews, the respondents clarified their responsible commitment and their genuine wish to teach optimism instead of only the problems caused by anthropogenic indifference. Therefore, teachers need to feel that also they are not left alone in their duty which requires a collective social progress steered by government, municipality and internal school cultures led by principals.

Previously, knowledge has been described as the result of co-creation that through transdisciplinarity initiates transformative learning. Therefore, it is significant to understand what it means to create and share knowledge, which is why Figure 6 and 7 have been associated with each other. Furthermore, the particular alignment of knowledge acquisition and teachers’ suggestions approximates how horizons are broadened and disciplines are transcend. Hence, in order to implement transdisciplinarity in teaching approaches, it is essential to empathise with the pattern how teachers form and shape their knowledge. The resulting learning dynamics in classrooms eventually implies how to synto-nise clothing consumption with sustainability’s multidimensional nature.

6 Conclusion

The American marine biologist Rachel Carson, who catalysed the environmental movement in the 1960s, once said that “mankind is challenged, as it has never been challenged before, to prove its maturity and its mastery – not of nature, but of itself.” With this in mind, the study at hand ought to respond to the world’s critical condition by searching for ways to support teachers in sharing knowledge on sustainable clothing consumption to curate threads between own lifestyles and their relevance for global concerns.

The confrontation with scientific knowledge, in which numerical facts accumulate in news feeds and communication channels, can lead to dazzling effects for Generation Z and consumers in general when they are exposed to negative stimuli. The vastness of environmental issues and their severity for humans’ survival are often difficult to process optimistically. In addition to this, the natural human desire of belonging and connectedness often overrules reasonable actions. This is particularly evident in clothing consumption, where symbolic meaning is placed above the awareness of material origin. Moreover, consumers in affluent countries usually do not experience the abundance of textile waste on landfills, or rivers that are polluted by the
dyeing of clothes, and the subsequent consequences. The attention in sustainable clothing consumption specifically amplifies an empathy for circumstances beyond personal reach.

In times of social upheaval, individuals have to be prepared to take an active role in facing the controversies of conflicting interests with compassion. Although students in upper secondary schools enjoy a kid-glove treatment in this important developmental stage, they already encounter global pressing matters with sophistication and dedication as it was described in the characteristics of Generation Z. Hence, this study deems to connect the spheres of courage with determinism and resulting societal activism. It also intends to build on the existing motivation and to give ideas and examples, how this motivation can lead to actual, long-lasting acts and become a vital part of how the Generation Z perceives itself.

Through critical thinking, students and teachers can influence how behaviour needs to change to bring about long-term improvements for sustainable co-existence. For this, it is essential to combine scientific reasoning with an existential examination in order to transform the bad forecasts for the future into personal assignments and challenges one is eager to tackle. In fact, this appears to be one of the strongest attributes for societies to transform sustainably. Therefore, education acts as a mediator between matters of urgency and how these can be solved ultimately. It provides essential strategies and confidence that are needed to lay the foundation for a desirable future – today.

### 6.1 Theoretical Implications

The investigation at hand relies on concepts that have been developed to address the current state of sustainable development as well as the education on the same purpose. Furthermore, the education on sustainable consumption is a sub branch of ESD. The area of sustainable clothing consumption is rooted in sustainable consumption in general, but has not been put into concrete relation to education before. Therefore, the overall construct of this thesis creates a new interlinkage of various sustainability phenomena specifically from an environmental perspective through the lens of clothing. This aspires new ways to create and share knowledge while associating the complexities of sustainability with the corresponding impacts of individual lifestyles. In addition, previous studies have mainly focused on transdisciplinary teaching on sustainable matters in higher education. This study provides exploratory insights on how transdisciplinary teaching approaches can be used effectively to integrate sustainable clothing consumption as a core subject in upper secondary schools.

### 6.2 Practical Implications

With this thesis, the author intends to analyse and develop opportunities for the Swedish school system to increase students’ and teachers’ awareness and understanding of sustainable clothing consumption. For this purpose, complementing teaching methods and strategies (i.e. suggestion grid, Table 5) were devised which support the education on sustainable clothing consumption. With the help of different learning scenarios, students shall become aware of how clothing affects the environment and how they can improve their ecological footprint. While this thesis
focuses on upper secondary schools and their teachers, the author believes that opportunities to learn about SCC could be integrated holistically to various school types or age groups.

Based on literature and the conducted interviews, it becomes evident that social norms strongly determine behaviour patterns. A societal transformation is necessary to approach the climate crisis with adaptive resilience. However, geographically remote circumstances often create a feeling of distance. The accessibility to clothing and its importance to consumers’ lives offers an excellent point of intervention to raise awareness through education and social learning. It brings urgent issues closer to students by not immediately overwhelming them with abstract matter. In this regard, education is perceived as the bridge between personal impact and global affairs. Transdisciplinarity has been proven as an opportunity to transcend boundaries; in this way, students are supported in developing a holistic opinion on a topic.

6.3 Societal Implications
This thesis ought to discover the potential of the Swedish education system with regards to sustainable development and its application through sustainable clothing consumption. The multifaceted nature of sustainability often challenges the adaptation of different worldviews, while a conflict of interest cannot be avoided completely. This can have as a consequence that environmental issues, for instance, seem too complex to tackle for an individual. The concept of SD strongly links to the reassessment of the ‘quality of life’ that is cultivated in affluent countries in order to generate an understanding of what has been destroyed and what is yet to be preserved. This particular reassessment demands external forces (e.g. politics) to scrutinise prevalent systems. Furthermore, it demands citizens to develop intrinsic motives to be more socially and environmentally responsible. In accordance with this, social systems can seize today's collective upheaval to transform to new behaviour patterns. Albeit, it is important to constantly encourage individual effort since the contribution of the individual can add up to an influential force for change.

7 Limitations and Future Research
The aim of the qualitative study was to examine the teachers’ awareness of sustainable clothing consumption in the current teaching and learning process. The teachers were asked how they define sustainable clothing consumption as a practice for sustainability, where it could be anchored in the educational framework and which support is needed to establish firm teaching methods. This data can be used to further develop the definition of SCC and SD and to initiate both, qualitative and quantitative research methods, which aim to analyse how the curricula can be adapted accordingly. The chosen method of taking notes as well as the immediate evaluation of relevant thoughts limits the existing data to the scope of the interview. While this strategy made it possible to gather first hand, unbiased and structured insights which were relevant for the research questions, succeeding interviews are recommended to, firstly, quantify data, and secondly, to expand the scope of interest in this matter. In addition to this, a closer examination
on the samples’ demographics is of interest since the diverse age segment shows intergenerational effort on ESCC, whereas the view on the importance of clothing differs.

For future research, it is also recommended to differentiate between the sustainable clothing consumption strategies and their potential misconception. Here, for instance, it is of value to understand the backgrounds of e.g. recycling and its energy consumption, secondhand and the over-donation to charities and the self-rewarding complexity that likely contradicts sustainable clothing consumption behaviours.

With schools as social learning environments, it is of interest to examine theories of social learning closer, how peer-to-peer behaviour can benefit identity creations and value manifestations. The prevalence of consumption practices relate closely to lifestyles and intrinsic motives. The concept of mindfulness and compassion within education shall cultivate roots towards more conscious behaviours that strive for physical and mental health. This sort of learning further approximates state of minds that are influenced by fear and worry due to environmental challenges. Through communication and philosophical instances, also found in environmental philosophy, students shall discover ways of resilient and responsive strategies as responsible citizens.

As for current school learning environments, the teaching-learning dynamics are influenced by curricula and relating syllabi. With a thorough understanding of what is missing for teachers in order to educate on sustainable development and clothing consumption, responsible actors must join forces and reassess the meaning of SD and its comprehensive implementation into a school culture. Here, it is advisable to let the decision-making instances in the school system (e.g. principals) participate actively in the development of SD implementation, in order to be able to bring about short-term and lasting changes possibly supported by SCC.


8 References


9 Appendix

9.1 Appendix I

INTERVIEW GUIDELINE

RQ 1: In which ways can the education on sustainable clothing consumption assist teachers in conjunction with their students to approach environmental challenges with more confidence?

1) What does sustainability mean to you?
2) How is sustainability defined in your school?
3) How do you plan your lectures with regard to sustainability?
4) How do you perceive the current syllabus in the context of sustainability? (is it enough/sufficient?)
5) In which context do your students see sustainability?
6) How would you describe your teaching method? (fact-based, normative, pluralistic)
7) How would you describe the relationship between clothing and sustainable consumption?
8) Which obstacles do you notice when it comes to sustainable clothing consumption?
9) Have you observed certain trends amongst your students when it comes to clothing?
10) Do you think that education can influence students in their clothing consumption behaviour?
11) How confident do you feel in teaching about sustainable clothing consumption?

RQ 2: What is needed to implement a transdisciplinary teaching approach to educate on sustainable clothing consumption?

12) Which initiatives do you take to educate yourself further on sustainable clothing consumption?
13) Where do you find information on sustainability for the subject you teach?
14) Does the school offer specific programmes on sustainable clothing consumption for teachers?
15) How would you like to be supported in the education on sustainable clothing consumption?
16) Would a teacher’s confidence in sustainable clothing consumption influence students’ learning motivation?
17) Could this raise the students’ awareness towards sustainable clothing consumption behaviour outside the classroom?
18) How much influence do you think this could have on their clothing consumption behaviour later in life?
19) How do you like the idea of a transdisciplinary training course on sustainable clothing consumption?
20) Which tools or material would support you in your teaching methods for sustainable clothing consumption?
21) How do you check if you meet the expectations within your teaching approach for sustainable clothing consumption?
22) What do you expect from the Skolverket to include in a transdisciplinary training course on sustainable clothing consumption?
9.2 Appendix II

The following table reveals the most prominent insights of each category where statements in form of key points of the interviewees are allocated. An ‘x’ symbolises if respondents perceived their answers as covered in other categories or if topics are not specifically revealed by a respondent. A concluding overview captures the most prominent insights to each category as it has also been provided in Chapter 4.1.
<table>
<thead>
<tr>
<th>TD</th>
<th>Sustainable Development</th>
<th>Teaching and Transdisciplinarity</th>
<th>Sustainable Clothing Consumption</th>
<th>Lifestyles</th>
<th>Social Anxiety</th>
<th>Over-consumption</th>
<th>Mindfulness</th>
<th>Teaching Materials for SCC</th>
</tr>
</thead>
</table>
| [1] | • Agenda 2030 and global goals: understand how everything is related  
• context social, ecological, economic  
• no consequences when living in rich part of world  
• way of thinking  
• many teachers don’t know how to include it  
• missing definition  
• keep myself updated on SDGs, I include it because it’s in my interest description what should be mentioned or discussed  
| • fact-based in combination with normative  
• own experience with scientific arguments  
• opinions need facts  
• nature science always a chapter in book, easy to relate to environment  
• always room to learn more  
• that we work between courses more openly and structured to include several goals at the same time and also highlight technical development  
| • good to have a base wardrobe that’s always in fashion  
• choices beneficial for planet  
• clothing big thing for teenagers: related to their world  
• to plant a seed to not follow trend to belong to a group  
• reaching topic connected to them like clothes to reach hearts and brains  
• more unsustainable clothing available  
| • lifestyle effects on environment  
• climate and ecological footprint  
• what you can do as individual with own lifestyle  
• if students don’t see consequences, hard to change behaviour  
• test in end: how would you change your lifestyle to reach sustainable development?  
| • social identity to understand shopping behaviour  
• group belonging: to communicate in form of what you’re wearing  
• peer pressure  
• social identity: to take care of each other and learn from each other instead of clothes as factor  
• a lot of time and effort and money to belong instead of getting to know each other  
| • T-Shirt for 40kr as bargain for yourself that you probably don’t wear  
| • psychological lesson: why we are consuming and how we work as individuals and as individuals in a group  
• when students get more self-esteem to live their life as they want to and not how others want it  
• psychology/identity creation: the better you understand these questions, the better you understand them  
• how we can reconstruct our way of thinking but also reconstruct how we act and teach ourselves and each other  
| • do I get extra time to do research or educate myself further?  
• documentaries create distances  
• short movies  
• global goals (SDGs)  
• no books because topic changing so much —> own material for new things (internet/computer)  
• learning plan: what happens now, what happens next  
• construct courses that we use as foundation when it comes to content, discussion  

| [2] | • living carefully, so children and grandchildren can also use the planet  
• more in actions than in words  
• we’re not told but it’s part of everything we do as teachers  
• no time to rest and relax  
| • many colleagues aware, interested and engaged in SD  
• you can always improve and continuously check agenda  
• combination of all teaching methods because long experience as teacher  
| • important to not buy new clothes all the time  
• difficult when young because you want to look like everyone else  
• the more choice the more difficult it is  
| • students not yet realised how much they can do  
• taking bike instead of car, you never question or feel the need because it’s a habit  
| • young beautiful people easily influenced  
• always try to impress  
• students think they are wearing what they want but still look like everyone else  
• peer pressure ranked higher on their list than what they know  
| • moms and dads show off children with fancy clothes  
• trends changing, students change together without realising it  
| • students growing, becoming stronger in their hearts  
• the sooner they start thinking about it, the stronger they will be  
• easier to make decision they can live happily with good consciousness  
| • reading articles whenever I see them  
• something to attract attention but not specifically plan all day what to take in  
• magazines that arrive four times a year  
• internet, TED talks, Bloomberg Quicktake, Youtube, textbooks  
• seldom have extra time  
• guidelines  

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<table>
<thead>
<tr>
<th><strong>students are future and they will take care of me</strong></th>
<th><strong>Mathematics: a lot of examples on sustainability</strong></th>
<th><strong>in their hearts what is right</strong></th>
<th><strong>older generation: no feel of need to change clothes over and over again</strong></th>
<th><strong>plan for lessons to simplify lecture planning: ready-made plan</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>• students are future and they will take care of me</td>
<td>• English: drop questions students can discuss but I don’t comment, I’m not telling what’s right or wrong</td>
<td></td>
<td></td>
<td>• how do we attract their attention? Then we can teach them anything</td>
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<td>• Mathematics: a lot of examples on sustainability</td>
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<td>• it has to come from the headmaster to attend a course</td>
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<td>• Mathematics: a lot of examples on sustainability</td>
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<td>• headmaster and colleagues: easier to do something together</td>
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<td>• Mathematics: a lot of examples on sustainability</td>
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<td></td>
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<td>• 3 legs: economy, society/social skills, biology/biodiversity: do them together otherwise won’t work to be sustainable</td>
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<tr>
<td>• Mathematics: a lot of examples on sustainability</td>
<td></td>
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<td>• it’s more in the classroom, not from leadership: has to be in interest of teachers</td>
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<td>• Mathematics: a lot of examples on sustainability</td>
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<td>• years ago only biology teacher, now also English or Swedish teacher bringing up by chosen literature</td>
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<td>• Skolverket does not say that you have to involve sustainability</td>
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<td>• curriculum for programmes bring it up, subject syllabi that teacher actually follow do not bring it up</td>
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<td>• Green Flag certificate but don’t do it very well</td>
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<td>• English: drop questions students can discuss but I don’t comment, I’m not telling what’s right or wrong</td>
<td></td>
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<td>• change happening in their lifestyles for a while but slowly go back to normal</td>
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<td>• English: drop questions students can discuss but I don’t comment, I’m not telling what’s right or wrong</td>
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<td>• clothing: easy for them to change it rather than taking away meat from food plate</td>
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<td>• hard to stick to changed lifestyle when all people around buy things or go on trips</td>
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<td>• when neighbours have it, I also want to have it</td>
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<td>• peer pressure</td>
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<td>• here at school you can be who you want to be, not necessary to have latest things</td>
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<td>• hard to not buy things</td>
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<td>• we have too much of everything, too much money</td>
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<td>• since 1980/90: more and more money, demand more and more to be happy</td>
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<td>• Swedish people have a lot that is not necessary</td>
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<td>• easier to throw away cheap things than expensive, so it should be more expensive</td>
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<td>• would be less stress to have less examination at the end: what they realised, how far got in their minds</td>
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<td>• older generation: no feel of need to change clothes over and over again</td>
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<td>• hard to get everything in</td>
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<td>• hard to find facts</td>
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<td>• not always time to do it because of content of syllabus to stick to</td>
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<td>• information about science/trends</td>
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<td>• collaboration with university</td>
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<td>• programme dedicated to it</td>
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<td>• updated textbooks</td>
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<td>• contemporary examples: specific questions to take up —&gt; platform for teachers</td>
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<td>• youth to youth, change of experience and also possible in other subjects</td>
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<td></td>
<td>• more rules from Skolverket: it is important, not only as discussion but how to do it in best way</td>
</tr>
</tbody>
</table>
| [4] | that environment isn’t damaged and that future generations don’t have to suffer because of our decisions | • that environment isn’t damaged and that future generations don’t have to suffer because of our decisions
• have talked about it with history colleagues: but not overarching or including all teachers of entire school independent from subject
• school: can be talked about but not specifically mentioned that needs to be included —> problematic because students will be the ones who are affected
• we have to think about it but don’t act on it | • non-judgemental, natural language in politics
• history: less controversial, more historical facts
• English: cultural values, literature, ideas about society and culture: sustainability can be included but not something students are going to be graded on
• English: pluralistic, I cannot force what students believe or how to see the world
• being able to answer all questions but delicately and without judgements
• physics and maths out the window: ’nothing to do with my subject’
• reading, writing thoughts, discuss it with classmates | • no one really cares if they throw jeans away after 3 months of wearing: denim popular among cowboys to wear them until they fall apart
• students don’t care or understand production process
• best product to best price: they don’t read tag to see where it has been curated
• History: encourage them to think how clothing produced
• if you have great social capital, secondhand is cool but those from more disadvantaged background it’s not cool anymore
• no easy way to find fairtrade clothing when it comes to average clothing | • 18 years old: start to understand their place in the world and how they impact it and why their choices matter; what to change for the better
• talking with open mind but if talking about food waste in US or global warming, you lose them very quickly: not accepting scientific facts
• cognitive dissonance | • will you be able to have a good life with just 8 shirts? —> most female students don’t care and change their wardrobe more frequently; magazines/influencers
• teenagers constantly chasing hot to date things
• this is what you need: social capital
• clothing, travel destination
• our culture focuses on perception, intelligence secondary
• after hit puberty so focused on how they perceive their looks, clothing so important
• searching for happiness | • rewarding themselves for recycling but buying 15 t-shirts imported from China
• students focus
• on their grades to be employed or go to university so they forget to think about other aspects
• feel like a hypocrite because I eat meat and dairy
• later impact: it’s not what they wear but how they wear it and who they are
• people don’t realise consequences until they have been able to reflect on them
• don’t have to
• students very aware, important what to wear
• don’t want to wear what is out even though the sweater is perfectly fine it matters what people think
• too much consumption and not enough ecological variance
• trend-driven: next year new colours
• now: who I seem to be
• they have the knowledge when older, then it gets more important to know there are other options
• hard to keep up since it’s not so popular in newspaper
• documentaries
• TV programmes
• WWF
• compendium with introductory topics with facts and references use as material for creating lesson
• break down of clothing: how much water for cotton jeans so you can understand resources needed
• experts in schools giving them understanding of conditions
• links to website
• not as tests because then students only care about their grades
• Skolverket: need two very clear examples:
  1) for teachers to understand
  2) exact same introduction for all schools in whole nation |

| [5] | many aspects, ecological, nature mostly unharmed, economical
• social side: a society that works
• ecological most precious one but it | • following what’s been discussed in the media to implement
• emphasise with students’ environment
• giving students hope, not only problems
• all of teaching methods | • hard to not wear what you’re confident in
• some students already very aware: make trend of it
• today maybe not super trendy to buy secondhand but maybe in future to
• they don’t see options/alternatives that are better, good options to not give up a lifestyle
• clothing: don’t have to | • students very aware, important what to wear
• don’t want to wear what is out even though the sweater is perfectly fine it matters what people think
• too much consumption and not enough ecological variance
• trend-driven: next year new colours
• now: who I seem to be
• they have the knowledge when older, then it gets more important to know there are other options
• hard to keep up since it’s not so popular in newspaper
• documentaries
• environmental programmes
• wished for more time
• digital platform: examples for group activities
• reports
• IPCC | • rewarding themselves for recycling but buying 15 t-shirts imported from China
• students focus
• on their grades to be employed or go to university so they forget to think about other aspects
• feel like a hypocrite because I eat meat and dairy
• later impact: it’s not what they wear but how they wear it and who they are
• people don’t realise consequences until they have been able to reflect on them
• don’t have to
• students very aware, important what to wear
• don’t want to wear what is out even though the sweater is perfectly fine it matters what people think
• too much consumption and not enough ecological variance
• trend-driven: next year new colours
• now: who I seem to be
• they have the knowledge when older, then it gets more important to know there are other options
• hard to keep up since it’s not so popular in newspaper
• documentaries
• environmental programmes
• wished for more time
• digital platform: examples for group activities
• reports
• IPCC |
| cannot be the only focus • Brundtland documents too loose, not specific enough • should be everybody’s goal to show students that it is important | environmental problem fact-based in beginning, reasons behind problem • different subject finding own knowledge • interactive, they can choose topic and present with discussion • exchanging with colleagues, meeting every week to give tips what worked well or recommending a book • doesn’t feel good if don’t know answers or approximation • being good advertisers just as the stores • meeting people with other professions than one’s own is beneficial, especially if you have common goal • writing, presentations, reflection, tests | make right decisions easier for students | stop shopping forever but see where they can make a difference • every choice can make a difference: decisions in their home relevant, close to them, they can touch and do here and now • I’m asking to make changes in their lives even though they have happy lives | doesn’t matter if rainy or cold: trend more important • teenagers haven’t found identity yet, hard for them to buy secondhand if not confident in yourself • hard to not wear what you’re confident in | according to seasons • buy a lot of clothes • mindsets are triggered • shop stimuli: that looks nice, it’s cheap ➔ good in making us buy things | if they stand in shops perhaps think once again: options to look for better one but easy to slip back to old way | Naturvårdsverket: thick reports, time consuming • universities: research and science: representatives or excursions • someone else than teacher talking about it to show that other people care • transdisciplinary course with strict structure • closer collaboration with textile centre (Borås) • easier access to knowledge for teachers and students |

[6] | not using more than there is possible to renew • complicated question, depending on area • very trendy word: used and misused in many situations —→ sometimes doesn’t mean a thing • school: doesn’t have a regulation/ideology that is presented • priority to have best results as possible | Biology I: one part ecology and sustainable development • try to connect between ecology and examples that students understand • syllabus leaves little time for improvisation • sustainability mentioned but not forcing me to deal with it; also very abstract: find your own way | marketing, PR, eco-friendly/sustainability in any kind of aspect just for people to buy things | if nothing else in society supports it, you can leave it | X | X | who you are, who they are: subject • not suited for standardised test, rather to make people think and act after ethical principles | lack of energy/time/inspiration • educational programmes on TV • course for teachers preferably one day and not only lectures • always need for good, simple, easy handled, short in time things that enrich your teaching • basic film material, e.g. Youtube 15 minutes • simple fact questions • useful links • using material under nose: textbooks, internet,
| [7] | • very wide complexity | • students can choose what they want to dig deeper in: often textiles day where you can exchange clothes in school | • education base of how you make your decisions to be more aware and make better choices builds on knowledge you have about things | X | • how we use natural resources and energy | • the moral has to be ground in your person you shall be aware of your own values: have to be critically personally and professionally what have you learned? What did we miss? What should we be learning? |
|     | • Brundtland commission definition, go further in definition | • mostly nature science teachers who take burden to talk about it find out what students want natural science programmes very tight what you’re supposed to discuss group discussions, tools like podcast or radio programmes but not so easy because you need a lot of techniques I try to not be a moralist not to give my values to students but to make them aware of their own values students have requests on content of courses on environmental issues, more than in other courses | | | | make a light lifecycle analysis: choosing textile products; come to point where you need more information databases not always easily available hard to be updated in all aspects: a lot happening in my subjects links on internet textile school collaboration perhaps you can leave for 1 or 2 days during the terms what we learn we can translate to students more exchanges with textile school simple internet tools comparison platform grading: to give students good material to read and study |
| [8] | • important to not waste too many things in life take advantage of what we already have | • German: texts about environment, how to live properly in world Swedish: speech about different subjects: students can choose | • first I wear t-Shirt to school, if it gets old I use it in the garden Go through wardrobe once or twice a year and check I don’t | • young people talk about sustainability and how to live lives but act differently young people are aware which clothes are expensive they want to show they are one among the others | • we buy too many clothes, don’t use them so long, get tired of them if they’re able to say what they think they have started to change their behaviour | school could bring in experts holding lecture about subject —– we could discuss and how we could increase our impact on students |

- 70 -
| 9 | • thinking in new ways, how we live our lives  
• design new system  
• if it should work, it has to be in all subjects in school in some way so everybody brings part to it  
• government needs bigger change on sustainability, in some courses it says little about it  
• was more before 2011, should be more important  
• content of courses not well related  
• we have green flag: what can we do as a school? —> don’t hear much about it  |
|-----------------|-----------------------------------------------|
| 10 | • to not be a part of throwaway culture  
• school same as in society: no existing consensus; rarely talk about it  
• school: try to separate trash but not as good as I am at home  |
| 11 | from list that is related to environment and lifestyle  
• climate change most common subject for speeches  
• fact-based  
• in German small talks  
• I know about grammar but not as much about sustainability in clothing  
• collaboration with other persons, doing a presentation where you must produce and discuss subject  
• need this one, so I can give it away to organisation  
• no room for this subject in my education  
• many boys too bad grades: more important than sustainability in clothing  |
| 12 | • struggling in my own world to be a good person but can’t change other person so much  
• other people must notice she has bought quite expensive sweatshirt but nothing too special  
• impact that school has is quite small, many other worlds much stronger like advertisement  
• comment on clothes = comment on their personality  |
| 13 | • whole world has to change mindset towards more caring attitudes, inner qualities like humbleness, equality —> goes hand in hand with sustainability = personality  
• people are out of balance: not mindful about earth or themselves and they live in their own created world  
• what goes beyond classroom is beyond knowledge  
• mindfulness as concept in school: rise level of consciousness early, to get more grounded in their being than in their  
• tools how to deal with subject in own lessons  
• discussions with other teachers how to deal with it: sharing good ideas  
• must be from principles to deal with subjects  |

• visiting textile museum frequently  
• in some courses I give questions: in order to solve it finding best solution need to look at different perspectives and also need good facts  
• live what you teach  
• new way of looking at consuming things  
• all teaching methods  
• in some courses I give questions: in order to solve it finding best solution need to look at different perspectives and also need good facts  
• live what you teach  
• new way of looking at consuming things  
• all teaching methods  |

• studying is a part of it but you have to come down to wisdom: going into something and your personality starts change: think differently, behave differently  
• combination of knowledge and wisdom = behaviour  
• clothing industry: so much about building up an image for company but many times promote clothes by using ads that focus on superiority: using sex, lust, not love, wealth; so if you buy their clothes, you’ll become elite, but elite not caring person  
• hero figure should be more one of a humble, peaceful, caring, loving person  
• we wear things we value, that can impress others but if people are impressed, we’d also wear wrong things  
• whole world has to change mindset towards more caring attitudes, inner qualities like humbleness, equality —> goes hand in hand with sustainability = personality  
• people are out of balance: not mindful about earth or themselves and they live in their own created world  
• what goes beyond classroom is beyond knowledge  
• mindfulness as concept in school: rise level of consciousness early, to get more grounded in their being than in their  
• tools how to deal with subject in own lessons  
• discussions with other teachers how to deal with it: sharing good ideas  
• must be from principles to deal with subjects  
• visiting textile museum frequently  
• in some courses I give questions: in order to solve it finding best solution need to look at different perspectives and also need good facts  
• live what you teach  
• new way of looking at consuming things  
• all teaching methods  
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• live what you teach  
• new way of looking at consuming things  
• all teaching methods  |

• studying is a part of it but you have to come down to wisdom: going into something and your personality starts change: think differently, behave differently  
• combination of knowledge and wisdom = behaviour  
• clothing industry: so much about building up an image for company but many times promote clothes by using ads that focus on superiority: using sex, lust, not love, wealth; so if you buy their clothes, you’ll become elite, but elite not caring person  
• hero figure should be more one of a humble, peaceful, caring, loving person  
• we wear things we value, that can impress others but if people are impressed, we’d also wear wrong things  
• whole world has to change mindset towards more caring attitudes, inner qualities like humbleness, equality —> goes hand in hand with sustainability = personality  
• people are out of balance: not mindful about earth or themselves and they live in their own created world  
• what goes beyond classroom is beyond knowledge  
• mindfulness as concept in school: rise level of consciousness early, to get more grounded in their being than in their  
• tools how to deal with subject in own lessons  
• discussions with other teachers how to deal with it: sharing good ideas  
• must be from principles to deal with subjects  |

| 14 | X |
| Combination of Results | • context | • future generations | • complex | • no existing consensus in school life | • very loosely/vaguely included in teaching guidelines | • school certification not sufficient in communication | • fact-based: beliefs combined with facts for true knowledge | • interactive learning environments (e.g. group work, discussions, speech, excursions) | • subject dependent easy/less easy implementation of sustainability | • interdisciplinary collaboration having common goal | • non-judgemental, student-centred | • clothing as central part of teenagers’ world | • from a lot to less things | • wardrobe with basic items | • knowledge about material origin | • trend | • availability | • risk of green consumerism | • new way of consumption: sharing | • ecological footprint | • individual choices | • without first-hand consequences, hard to change behaviour | • from change to habit | • cognitive dissonance | • better alternatives without compromising on happiness | • societal support | • peer/social pressure | • group belonging | • attempt to impress | • influenced by media | • search for happiness through clothing | • social identity clothing industry inducing false ideals | • available bargains | • changing trends | • since 1980s/90s: more money, more demand for happiness through materiality | • cheap goods thrown away easily | • self-rewarding through recycling | • visual stimuli in shops | • critical reflection | • reconstruct way of thinking | • identity creation | • students growing, becoming stronger in their hearts | • not what they wear but how and who they are | • risk for rebound effect | • moral ground in personality | • awareness of own values | • more caring attitudes and inner qualities | • consciousness: grounded in being than only thinking | • stabilising identities | • time for additional education | • short movies | • internet | • ready-made teaching plan/guideline | • foundational courses | • collaboration with university | • youth to youth: change of learning experience | • Skolverket: compendium, proper material for students to read and study; nationwide introduction; inspirational material | • easy knowledge access | • experts: how as teacher to increase impact on students | • sharing ideas: teacher platform | • diverse media (magazines, radio, TV, social media) | • workshops together with students | • sensitive to subjects